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# Vegetable

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## OUTLOOK & SITUATION

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# Summary

Through mid-1984, prices of most vegetable crops and products will average higher than last year's depressed levels. Consumer income increases due to the economic recovery portend a modest, gradual strengthening of demand for vegetables in 1984. In addition, reduced production and lower supplies of some items will boost prices.

The effect of the summer's severe drought on the total vegetable supply has been relatively small. Fresh vegetable supplies remained ample because California, the leading producer, had plentiful irrigation water. A similar dominance of the unaffected Western States in potato production limited the decline in that crop. Although sweet-potato yields were reduced by drought, the downturn in sweetpotato production came primarily from an area decline, to the lowest acreage on record. Production of some processing vegetables fell substantially because area was reduced and late plantings and the dry summer lower yields. However, higher carryover stocks limited the drop in total processed supplies.

Fresh vegetable shipments during July-September rose 4 percent from a year earlier, while the grower and retail price indexes for fresh vegetables jumped 16 and 13 percent, respectively. Since supplies were apparently larger than a year ago, the price rises evidently stem from increased consumer demand. Weather-reduced home garden production may have also figured in the rise. For 1984, the favorable outlook for consumer incomes and the growing preference for fresh produce point to likely gains in supplies and consumption, and a rise of 5 to 10 percent in both grower and retail prices. For 1983, grower prices will average about 6 percent higher than in 1982, while retail prices (excluding potatoes) will gain 3 percent. The projected retail rise for this year would be the smallest since 1976.

Of the processed vegetables, canned supplies will decline the most because of sharp reductions in production and packs of snap beans, sweet corn, and green peas. Overall, canned supplies in 1983/84 will total 6 to 10 percent less than in 1982/83. Meanwhile, total frozen supplies will decline only slightly from last season's alltime high.

Despite the reduction in supplies of processed vegetables, sharp runups of the leading price indexes are unlikely because of the large frozen vegetable supplies, ample stocks of most canned vegetables, and declining per capita use of the three items in shortest supply—canned beans, corn, and peas. For all of 1983, the retail price index for processed vegetables will average about 1 percent higher than in 1982, the smallest rise since the index declined in 1975. The index will probably post a gain of 5 to 9 percent in 1984, compared with the average rise of 8 percent in 1978-82.

The first estimate of the 1983 fall potato crop placed output at 5 percent less than last year. Low prices from the 1982 crop and a reduction in processing contract tonnage lowered acreage, while this year's average yield of 278 cwt per acre is 5 cwt less than a year ago. Higher prices will be supported not only by the smaller supply, but also by good demand. Apparent consumption of table and processed potatoes thus far in 1983 has risen from the same period of 1982. With restaurant and french fry sales burgeoning and contract tonnage reduced, some Western processors have bought potatoes on the open market, raising prices. Finally, the decline in 1983 world production could mean larger U.S. exports of potatoes and potato products.

Grower prices for the 1983 crop will likely average between \$5.25 and \$5.75 per cwt, compared with \$4.45 and \$5.41 for 1982 and 1981, respectively. Meanwhile, retail prices of fresh potatoes through mid-1984 will average about 25 percent higher than the relatively low year-earlier levels. Frozen potato product prices, steady since mid-1982, will probably rise because of increased demand, lowered stocks, and higher raw product and cooking oil costs.

This year's sweetpotato production was the second smallest on record. Because of the lower output, grower prices for the 1983 marketing season could challenge the record of \$13.60 per cwt for the 1980 and 1981 crops.

Dry bean production for 1983 totaled 15.5 million cwt, 38 percent less than last year and 52 percent lower than in 1981. The primary reason was acreage reductions in response to sharply lower 1982-crop prices. Season average grower prices for 1983 should range from \$22 to \$28, compared with \$13.80 in 1982, the lowest since 1973.



## SUPPLY, DEMAND, AND PRICE OVERVIEW

### Farm Situation

#### *Cash Receipts To Rise Slightly in 1983, Again in 1984*

Currently, it appears that growers of vegetable crops will obtain higher cash receipts from marketings in 1983 (table 1). ERS forecasts receipts at \$8.75 billion, compared with \$8.5 billion in 1982. Meanwhile, cash returns to growers of all crops are currently estimated at \$70 to \$74 billion, down from \$74.4 billion in 1982.

The rise in vegetable returns will be propelled by fresh vegetables. Despite this year's adverse weather, total fresh supplies should be near a year ago, and for the entire year grower prices will average moderately higher. Improved consumer demand has aided the price increases, while the dominance of California as a supply area checked the effects of the drought on supplies. Prospective gains in prices and production in 1984 should boost receipts to fresh vegetable growers again.

Lower contract prices for some major items and reduced production will push down 1983 cash returns to processing vegetable growers. The lower prices stem from the large 1982/83 processed vegetable supplies and the limited crop alternatives. Meanwhile, the wet, cool spring

combined with the dry summer to reduce production of most items.

For potatoes, 1983 cash receipts will probably post a slight increase from 1982. In the last 3 quarters, strong prices due to good demand and smaller crops offset the low prices of the first quarter of the year. The reduced fall crop and the potential for more open-market purchases of potatoes for processing should buoy 1984 prices and returns.

Receipts of sweetpotato farmers in 1983 should revive from 1982's low total because of the sharply reduced output and the resulting higher prices. The majority of sweetpotato marketings occur before the start of the next calendar year. Also, after short crops in 1977 and 1980, relatively high prices for the subsequent year's crop followed.

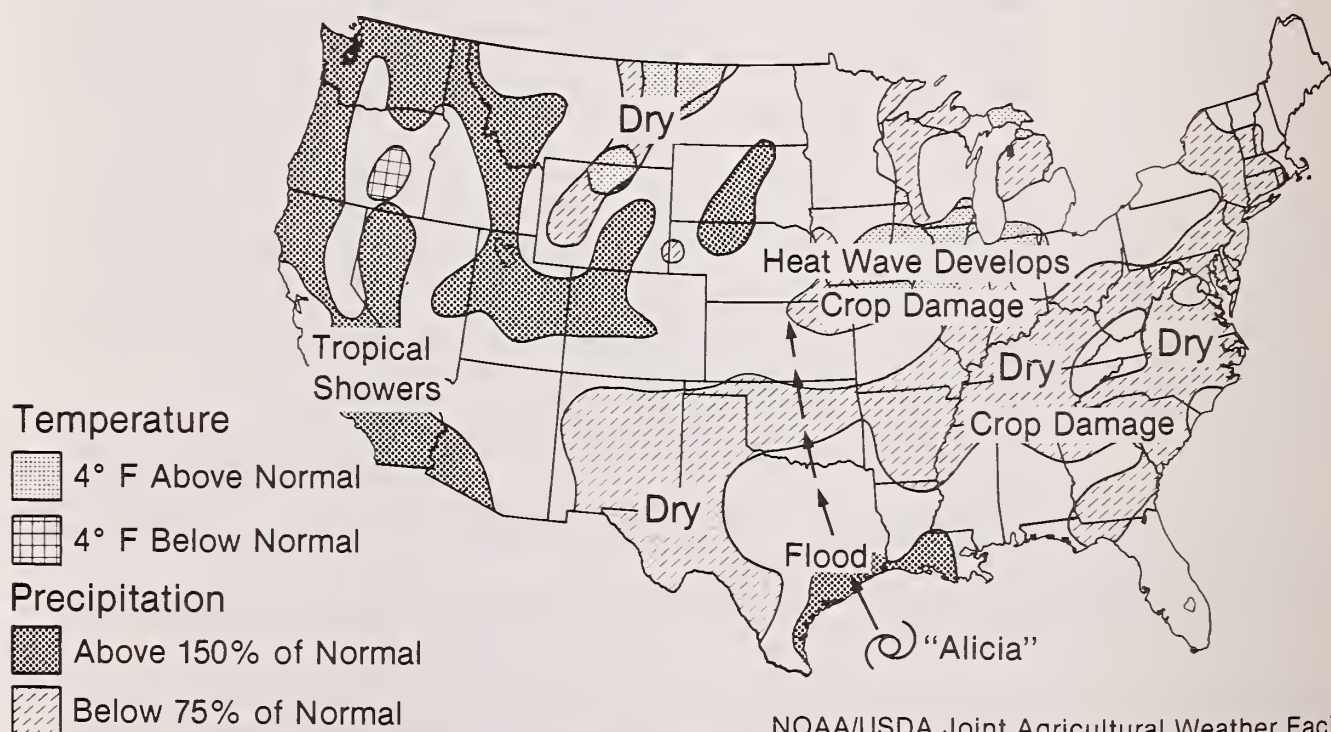
Grower prices of dry beans have risen sharply since early in the year because of this year's small output and improved export potential. Although receipts for 1983 will fall from 1982, they should rebound in 1984.

#### *Vegetables Fare Moderately Well In Agricultural Economy*

For 1983, the ratio of prices received by commercial vegetable growers to prices paid for commodities and ser-

## Weather Highlights

*Summer (June—August 1983)*





vices, interest, taxes, and wages will likely be near last year's ratio (table 2). The ratio for growers of potatoes, sweetpotatoes, and dry beans will fall slightly because potato grower prices averaged lower over the first half of 1983. In comparison, because the Payment-In-Kind (PIK) program and the summer's drought sharply boosted prices of feed grains, oil crops, and cotton, the ratio of prices received for all types of crops to prices paid will rise.

For 1984, the ratio for potatoes, sweetpotatoes, and dry beans will post a rise after this year's smaller crops. Meanwhile, although the index of prices received for commercial vegetables will rise in 1984, it may not match the gain in the prices paid index, leaving the ratio down slightly or unchanged. The prices received index for all crops is expected to gain moderately in 1984, suggesting more favorable crop alternatives for vegetable growers next year.

This year's rise in the parity index, at about 3 percent, will be the smallest since 1968. The lower rate of inflation reduced the rate of gain in almost all components of the index, and prices paid for fertilizer and fuels and energy declined. PIK-reduced demand for some farm inputs also slowed the gain in the index. With a higher inflation rate forecast for 1984, as well as larger increases for fertilizer, fuels and energy, and wage rates, the 1984 parity index will likely average 4 to 6 percent higher than in 1983.

#### ***Drought Has Small Impact On Total Supplies***

In weather, 1983 has been a year of extremes. First, El Nino caused a wet, cool spring that reduced spring fresh vegetable supplies and delayed planting of summer crops in many areas. Then the worst drought in over 50 years reduced production in many areas of the Southeast, Northeast, and Midwest. However, the cumulative impact of this year's aberrant weather on vegetable supplies has been relatively small.

The drought's effect on fresh vegetable supplies were offset by large production in California, which was unaffected by the drought. Of the high volume vegetables, California is the predominant summer supplier of lettuce, tomatoes, broccoli, cauliflower, and cantaloups. In addition, it produces the highest summer volume of peppers, celery, and carrots. However, summer shipments from Michigan and New York, the other major summer supply areas, did fall substantially.

Among other crops, the scattered nature of potato production limited the drop in the fall crop. However, the weather did contribute to the output reduction for sweetpotatoes, which are produced mostly in the Southeast. In addition, the drought lowered production of processing vegetables in the Midwest, although generally higher carryover stocks will ensure adequate supplies for most items through the 1983/84 season.

Regionally, New York was one of the hardest hit States. Potato and onion yields fell 6 and 35 percent, respectively, from a year ago, while fresh vegetable shipments during July-September dropped nearly a fourth. In all Eastern States, yields of processing vegetables fell by an average of 22 percent, while in the Midwest yields

dropped 15 percent. Wisconsin, Ohio, and Pennsylvania potato yields dropped the most of the major States.

The 1984 weather outlook is, of course, uncertain. But nearly every year a major climatic event influences production. Examples include Florida freezes, El Nino, and drought. However, the heavy spring rains and big 1982/83 snowpack in the Western States ensure adequate water for irrigation needs in that region for 1984.

## **Vegetable Demand and Price Situation**

### ***Economic Recovery Boosting Demand***

The economic recovery, underway since late 1982, has begun to push up demand for food. Retail sales data for January-August, deflated for price changes, indicate about a 4-percent gain in the volume of grocery store sales, while sales by eating and drinking places posted an even more robust rise of 7 percent (table 3).

Evidence indicates that demand for vegetables, especially fresh, has increased. Despite increased fresh vegetable supplies this summer, both grower and retail prices rose substantially from a year earlier. Also, since the beginning of the year, arrivals of fresh vegetables at major terminal markets have risen 2 percent from a year earlier. Furthermore, retail volume at fruit stores and vegetable markets has also risen 2 percent. Meanwhile, the increase in restaurant sales probably aided the apparent gain in disappearance of frozen potato products during first-half 1983. Disappearance of other processed vegetables has also risen.

Real gross national product is forecast to gain about 3 percent this year, with a stronger year-to-year increase in prospect for 1984. The year-to-year gain in 1984, however, will mask a quarterly pattern of decelerating recovery, and doubt exists as to the strength and sustainability of the recovery into 1985. Nevertheless, these gains portend a modest and gradual strengthening of demand for agricultural products through 1984.

Meanwhile, the international recovery appears to be picking up steam and is forecast to strengthen through 1984. However, lingering debt problems among some developing nations may dampen the gains. These debts could also soak up much of these nations' foreign exchange, rather than its going to food imports. In addition, no appreciable drop in the value of the U.S. dollar is expected in the coming months, and this will continue to inflate prices of U.S. agricultural exports. Pulses and processed vegetables would be the most affected vegetable items.

### ***1984 Retail Price Gains To Be Slightly Higher Than 1983***

The rate of gain in 1984 retail prices of vegetables will increase from this year's small rises. Increased consumer demand will probably be a primary factor, but the smaller supplies of potatoes and some processed vegetable items will also figure in the increase. In addition, marketing costs will probably rise more than in 1983 because of an expected higher rate of inflation. For 1984, the retail price index for fresh vegetables will likely rise 6 to 12 percent, while the retail index for processed vegetables should gain 5 to 9 percent. Meanwhile, the retail



prices of all foods during 1984 are expected to rise 4 to 7 percent.

For all of 1983, the retail price index for fresh vegetables will be up about 2 percent from 1982 and 3 percent from 1981. Lower prices of potatoes have tempered the rise of that index in the past 2 years. Meanwhile, the processed vegetable retail index will increase only about 1 percent from 1982. The large 1982/83 supplies and the declining consumption of canned vegetables limited the rise.

Slower marketing cost rises also contributed to 1983's stable vegetable prices. Through September, the ERS marketing cost index rose 2-1/2 percent from last year.

## **FRESH VEGETABLES**

### **Outlook and Recent Developments**

#### ***Summer Shipments and Prices Up From Last Year***

Shipments of fresh vegetables from major growing areas during July-September rose 4 percent from a year earlier, and melon shipments posted a hefty 13-percent gain (table 5). The increase occurred despite a slight acreage reduction and this summer's drought in the Midwest, Northeast, and Southeast.

Supplies of the major items—lettuce, tomatoes, and onions—gained only slightly; larger shipments of the smaller-volume crops accounted for most of the increase. Crops posting particularly strong rises included cucumbers, broccoli, cauliflower, and peppers. Carrots were the only item to trail last year's total.

The particularly sharp rise in watermelon shipments was caused by the wet, cool spring, which delayed plantings and subsequent harvests. The delayed crops forced spring quarter volume down nearly a fourth from 1982, while inflating the total for the summer months. Meanwhile, gains in cantaloup and honeydew supplies occurred despite substantial planting cutbacks.

Despite the larger supplies, both grower and retail prices rose from last summer's depressed levels. However, prices retreated from the weather-induced highs of the spring quarter. The grower index during July-September averaged 115 (1977=100), compared with last summer's 99 (tables 6 and 7). Meanwhile, the retail price index rose 13 percent to 283 (1967=100).

Increased consumer income and shifting dietary habits appear to have been the main factors behind the price rises, since supplies were larger. Real disposable personal income during third-quarter 1983 rose at an estimated annual rate of 5.6 percent, the strongest such gain since third-quarter 1981. The concomitant rises in vegetable supplies and prices and consumers' income suggest a possible increase in the demand for fresh vegetables. That is, consumers are willing to pay more for similar quantities.

The increase in consumers' income has likely spurred the strong gain in away-from-home eating thus far in 1983. With salad bars becoming more and more of a staple menu item, the increase in restaurant sales has probably

contributed to the more robust fresh vegetable prices this year.

Summer weather the past 2 years and its effect on home garden production and roadside stand sales also may have influenced price patterns. In 1982, moderate summer weather and open fall weather (and late frosts) may have decreased purchases of commercially produced vegetables. In contrast, this year's late spring and dry summer weather probably adversely affected home garden output, creating a supply void for commercial vegetables to fill.

Finally, marketing system developments contributed to the gain in retail prices. Truck rates this summer were up moderately from a year ago. Also, after the farmer's share of retail prices of fresh vegetables rose to 34 percent in May, other actors in the marketing system may have attempted to increase their margins.

#### ***No Change in Fall Acreage; Prices Likely To Average Higher***

This fall, acreage of seven fresh vegetables is nearly equal to last year's (table 4). Lettuce area is unchanged, while good prices during 1982/83 spurred an increase in tomato acreage. Broccoli acreage probably rose in part because of processors' needs to rebuild stocks from this summer's lows. However, celery, carrot, and sweet corn acreage declined substantially.

Production of a few other vegetables in Florida may also be down this fall and winter because of crop substitution. Some of the affected items could include snap beans and sweet corn. This year's sharp production cutback of corn for grain reduced seed corn stocks and caused the plantings substitution.

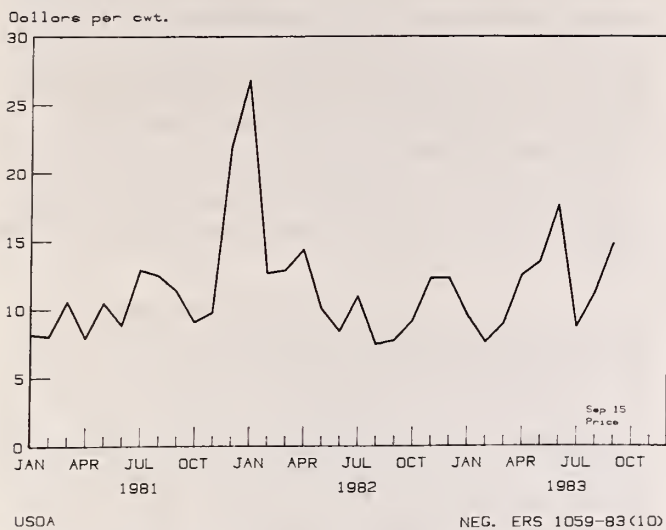
Although total fresh vegetable supplies this fall should approximate a year ago, grower and retail prices will likely average moderately higher than last year. Improved consumer demand and income and higher transportation costs provide the basis for the gains. Based on these factors and the typical seasonal rise in prices, the grower price index during October-December will likely rise 15 to 20 percent from last year. The grower index for all of 1983 will average about 127 (1977=100), compared with 120 in 1982. The retail price index (excluding potatoes) is expected to range from 290 to 300 (1967=100) this fall, compared with 257 in fall 1982, and it should average about 300 for all of 1983, a 4-percent rise from last year.

#### ***Mexican Supplies Likely Up Again***

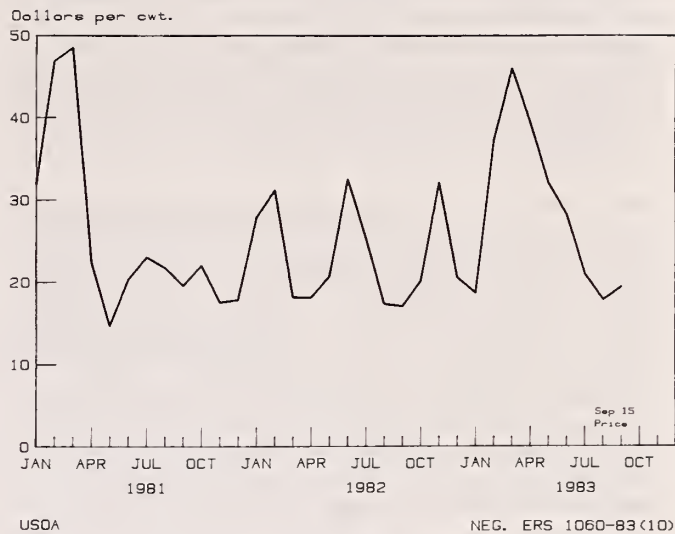
During the winter and spring, Mexico provides a large portion of the U.S. supplies of fresh tomatoes, peppers, cucumbers, squash, eggplant, and snap beans. But prior to the series of devaluations of the Mexican peso in 1982, the Mexican competitive position on the U.S. market had deteriorated. However, those devaluations, which make the American market lucrative, spurred a large 1982/83 acreage increase. Although poor weather prevented a rise in export production to match the acreage gain, Mexico increased its U.S. market share of all items except peppers. Except for those growers most heavily hit by the poor early season weather, 1982/83 was a profitable year.



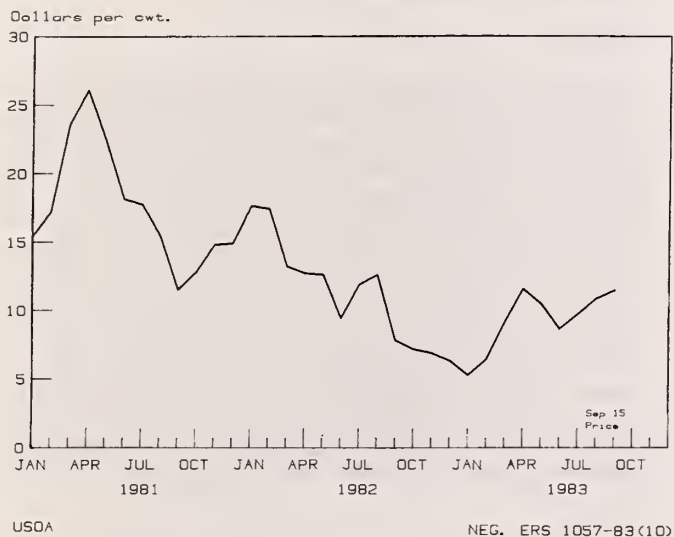
Lettuce: F.O.B. Shipping Point Price



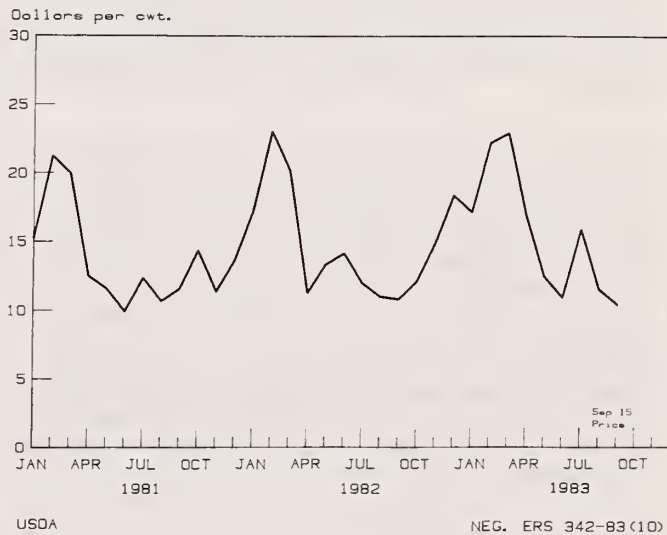
Tomatoes: F.O.B. Shipping Point Price



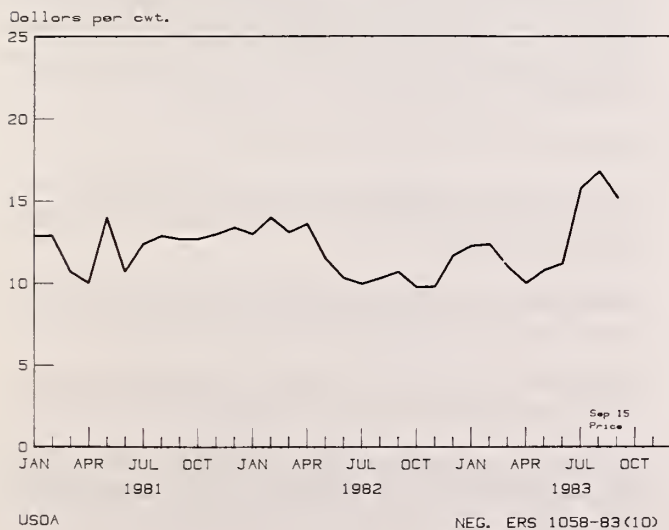
Onions: F.O.B. Shipping Point Price



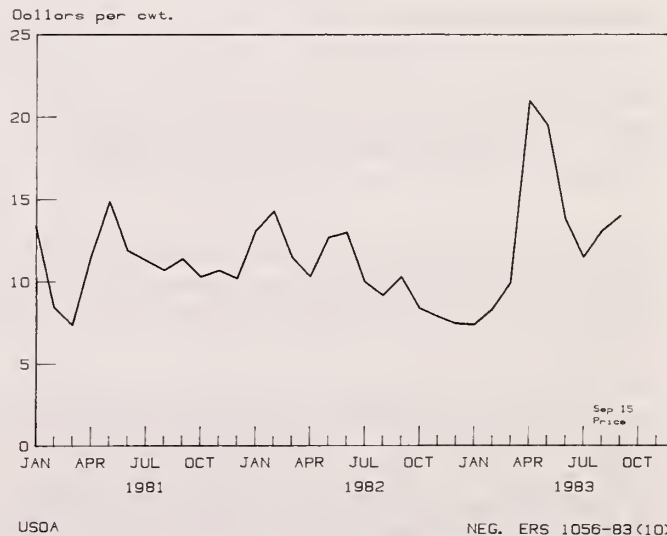
Sweet Corn: F.O.B. Shipping Point Price



Carrots: F.O.B. Shipping Point Price



Celery: F.O.B. Shipping Point Price



No published estimates are available, but it appears that for 1983/84 there will be about a 15-percent increase from 1982/83 in Mexico's planted area. Such an increase would bring plantings to a record level. The factors influencing the larger plantings include the high value of the dollar relative to the peso, last season's profitability, and the relatively low guaranteed prices for grains and oilseeds.

Given average yields, the 15-percent increase in acreage would result in exportable production increases from 1982/83 of 18 percent for tomatoes, 92 percent for bell peppers, and 53 percent for cucumbers. Similar sharp gains would occur for eggplant, squash, and beans. If export shipments rose to a level that adversely affected U.S. market prices, the Mexican Vegetable Growers Association would probably restrict the volume shipped by imposing stricter quality controls. (See "Mexican Winter Vegetable Outlook" in the October 1983 issue of Foreign Agriculture Circular: Horticultural Products, published by USDA's Foreign Agricultural Service.)

### ***CBI Impact To Be Small***

In August, the Caribbean Basin Recovery Act, also known as the Caribbean Basin Initiative (CBI), was enacted. The main provision is a 12-year period of duty-free access to U.S. markets for products from beneficiary countries.

The Caribbean Basin countries are not major U.S. suppliers of vegetables or vegetable products. Some of the more important items include dasheens, yucca, chayote, and yams, substantial portions of which are for Puerto Rican consumption. Furthermore, only a small percentage of U.S. vegetable imports from the Caribbean Basin are currently subject to duties. Fresh green beans are the principal dutiable vegetable item that will now enter duty-free. Other products which are not now entering in significant quantities but which will benefit from duty-free treatment under the CBI include winter and mid-summer cucumbers, onions, spring tomatoes, asparagus, broccoli, and mushrooms.

(See "Caribbean Basin Initiative Becomes Law" in September 1983 issue of Foreign Agriculture Circular: Horticultural Products.)

### ***Higher Prices Likely in 1984***

For 1984, the supply and demand factors point to a likely gain in supplies and consumption, and a rise of 5 to 10 percent in both grower and retail prices of fresh vegetables. In brief, the following will affect the supply, demand, and prices of fresh vegetables during 1984:

- **Consumers' income**—Consumers' incomes and consumption expenditures are expected to rise more than in 1983. This could continue the strong fresh vegetable demand that has characterized second-half 1983 and will likely buoy 1984 grower and retail prices.
- **Tastes and preferences**—The trend toward greater fresh vegetable consumption does not yet appear to have ended. Recent nutrition research and dietary guidelines favor fresh produce. Also, restaurants continue to promote their salad bars or add them. Even McDonald's, the nation's largest fast-food chain, which has been one

of the last bastions of "non-salad bar" restaurants, is now test-marketing salad bars. In addition, many retail grocery stores are now offering salad bars.

- **Imports**—Increased planted area and the peso dollar exchange rate will likely favor Mexican shipments into the U.S. during first-half 1984 at levels somewhat greater than in 1983.
- **Weather**—The long-term crop moisture index indicates ample water for irrigation in the Western States for 1984 crop use.
- **Pests**—A recurrence of a whitefly infestation in the desert production areas of California and Arizona could disrupt early 1984 lettuce supplies.
- **Marketing costs**—In general, marketing cost increases tend to follow the rate of inflation, which is expected to rise slightly next year. Railroads have reemphasized piggyback transportation of fresh produce. This competition with trucks could temper transportation cost rises next year.

## **Prospects for Leading Items**

### ***Lettuce***

Total fall lettuce acreage is virtually unchanged from a year earlier. California's central coast region and the San Joaquin Valley reported relatively good conditions and will supply the bulk of the crop through November. The desert areas of California and Arizona will play an important market role from mid-November into next year. Acreage in Yuma County, Arizona, rose 10 percent, but heavy rains early in October damaged some fields there and in other parts of the State. In addition, the whitefly population in Yuma has increased and could reduce supplies late this year and in early 1984. The whitefly—which wreaked havoc with the 1981/82 desert crop—causes a yellowing of the crop and reduces yields. During the first 3 weeks of October, lettuce shipments from major growing areas totaled 6 percent less than a year earlier.

Hot weather in late September and early October reduced yields and lessened the quality of lettuce in the Salinas Valley, and this in turn sharply boosted shipping point and terminal market prices. With improved demand and with potential supply problems in the desert areas, lettuce prices could continue to be buoyant for the remainder of the fall quarter.

Other lettuce market developments:

- **Daily average shipping point prices** during July-September were \$5.35 per carton of 24 heads, compared with \$4.09 in 1982.
- **Summer lettuce shipments** from principal growing areas totaled 1 percent more than a year ago.
- **The retail price index** for lettuce during the summer was 24 percent higher than last year.
- **Through late October**, California lettuce traded at \$5 to \$11 per carton at shipping points, averaging about \$10.



## Tomatoes

Prospective tomato harvest area for the fourth quarter is forecast at 10 percent more than a year ago. In Florida, which accounts for 96 percent of the fall acreage, area is up 11 percent. Growers apparently upped their plantings in response to the favorable prices received in 1982/83. Field conditions in October were rated as good to excellent in all areas. In addition, Mexican acreage is probably up about 15 percent. The prospective larger supplies augur steady or slightly declining prices for this fall.

Other fresh tomato details include:

- The retail price index for tomatoes during July-September averaged 1 percent higher than last year.
- U.S. tomato shipments during the summer totaled 2 percent more than last year.
- Total tomato shipments into the United States from Mexico during the 1982/83 season rose by over a fifth from the previous season.

## Onions

Summer storage-onion output totaled 18.8 million cwt, 8 percent less than last year's record-large crop (table 9). Both an area reduction and a decline in yield dropped the total. Regionally, the Western States' outturn increased slightly, but it did not offset the reduction of almost 40 percent in the New York crop. The wet spring and hot, dry summer in that State reduced bulb sizes and yields.

Over the next few months, onion prices to growers will likely remain relatively steady, and average markedly above a year earlier. Retail prices will follow a similar trend. Earlier in the summer it was thought that a reduced Japanese onion crop might spur increased exports and higher prices. However, better weather has altered the outlook, with the crop there likely to be near last year's bumper harvest.

Other facets of the onion outlook and situation:

- For the 1984 spring crop, Texas growers intend to plant 15,000 acres, 9 percent less than in 1983. That would be the smallest acreage since 1951.
- Total 1983 onion output is placed at 36.3 million cwt, down 13 percent. Summer nonstorage production fell 25 percent from a year ago.
- The September average retail price was 31 cents per pound, compared with 28 cents a year ago and 22 cents in February.
- The mid-September average grower price of \$11.50 per cwt was up 47 percent from a year earlier.

## Other Fresh Vegetables

- Grower and retail celery prices have been substantially above a year earlier since spring. The sharply lower fall acreage will likely extend those price patterns.

- Smaller area of carrots this fall will likely maintain the strong prices prevalent the last few months.

- Since early summer, cabbage prices have been sharply higher than last year, and they may continue so this fall. Shipments from Wisconsin through late October ran 17 percent behind last year, while the summer's drought likely reduced the important New York storage crop.

## PROCESSED VEGETABLES

### Outlook and Recent Developments

#### 1983 Production of Major Items Decreases

This year's contract production of four major processing vegetables (snap beans, sweet corn, green peas, and tomatoes) fell 9 percent from 1982 (table 12). Production of all four crops declined. With respect to the side-dish items (beans, corn, and peas), processors, especially freezers, contracted for fewer acres this year because of large 1982/83 supplies, while this year's damp spring and dry summer lowered yields. Total output of the three crops dropped 19 percent. Although tomato processors had actually raised their 1983 contract tonnage, early and late season rains reduced yields from 1982's record highs to leave total contract production at 6.9 million tons, compared with 7.1 million in 1982.

Production of dual-use crops (for fresh market and processing) during first-half 1983 showed mixed results. The extremely wet spring weather in California reduced broccoli production 12 percent, and that in turn lowered the spring frozen pack and stocks. However, higher production during July-December should relieve some pressure on frozen supplies.

Carrot production rose substantially from a year earlier during January-June, and the increase may have added to the already high frozen stocks of carrots. However, based on average yields, carrot output during the second half of 1983 will probably decline a tenth. Meanwhile, total 1983 cauliflower production will likely fall slightly.

Other developments in processing vegetable production include:

- California produced 6 million tons of tomatoes, or 87 percent of the total U.S. crop, compared with 85 percent in 1982.
- With respect to the three side-dish items, Wisconsin produced 27 percent of the total and ranked first in the output of each of the crops. Minnesota, Oregon, Washington, and New York followed.
- The Midwestern States accounted for a larger share of production this year, primarily because of reduced contract needs of freezers, who are prevalent in the Pacific Northwest.
- Green pea production this year is the second smallest since 1960; sweet corn the smallest since 1980; and snap bean the smallest since 1966.
- Summer onion production in California, utilized primarily for dehydrating, declined 17 percent from 1982.



## **1983/84 Supplies To Be Down, But No Sharp Price Runups Expected**

This year's reduced production of processing vegetables will translate into reduced packs for most items and leave total 1983/84 supplies down from 1982/83. Increased carryover stocks will mitigate the effects of the reduced packs, though.

Canned supplies will decline the most because of sharp reductions in the three major side-dish items. This year's combined pack of those items will likely total 110 to 120 million cases (basis 24/303), compared with 133.2 in 1982. If so, this year's total will be the lowest since 1964. However, because of lower combined carryin stocks, the drop in total supplies of the three items will be greater than the pack decreases. Supplies of canned tomatoes, tomato juice, beets, carrots, and sauerkraut should approach last year's because of higher carryin holdings. Overall, 1983/84 canned supplies will be 6 to 10 percent less than in 1982/83 (table 15).

Total frozen supplies for 1983/84 will decline only slightly from 1982/83's alltime high, largely because of a 75-percent rise in the carryover. Despite the substantial decline in the packs, 1983/84 supplies will likely fall only 2 to 4 percent from 1982/83, to about 15 percent above the average for the previous 5 years (table 16). The combined supplies of snap beans, sweet corn, and green peas will be down by about the same percentage as the total. Indicative of the ample frozen supplies, stocks on October 1 totaled 2.05 billion pounds, compared with the alltime high reading of 2.1 billion a year earlier (table 17).

Despite the reduced processed vegetable supplies for 1983/84, sharp runups of the leading price indexes are unlikely for several reasons. The large supplies of frozen vegetables should continue the pattern of stable prices well into 1984 for most frozen items; the stable price pattern has prevailed since fall 1982. In addition, the relatively ample stocks of most canned vegetables, especially tomatoes and tomato products, will limit price rises. Even though the combined supply of canned beans, corn, and peas will be the smallest in recent memory, per person use of these items has declined in the past decade, which could temper price gains of these items. Also, there may be some substitution of frozen and/or fresh vegetables for those canned items in short supply. Finally, the farm value of most processing vegetables probably declined this year. This, combined with marketing costs that have slowed with inflation, will ease some of the upward pressure on processed vegetable prices.

For all of 1983, the retail price index for processed vegetables will average about 1 percent higher than in 1982, the smallest rise since the index declined in 1975. The index will probably post a rise of 5 to 9 percent in 1984 (table 13).

The canned and frozen vegetable wholesale price indexes for all of 1983 are now forecast to rise about 2 percent from 1982. Because of the likely higher prices for canned beans, corn, and peas, next year's canned index will increase 5 to 10 percent. However, the still-large frozen supplies will likely keep next year's frozen index gain similar to this year's.

## **1982/83 Frozen Disappearance a Record; Canned Movement Up Slightly**

Record-large supplies of frozen vegetables during 1982/83 brought steady prices, which in turn caused disappearance of eight leading items to rise to a record-high 2.25 billion pounds, up 3 percent from the previous year. Record movement of sweet corn (up 16 percent) and green beans (up 2 percent) highlighted the gain, although use of green peas and lima beans also rose substantially. Meanwhile, use of broccoli, carrots, cauliflower, and spinach declined.

Canned disappearance during 1982/83 rose slightly from 1981/82 but was 5 percent below the 5-year average. Increased tomato juice shipments contributed to the gain, but they were still sharply below normal. Cannery of whole tomatoes shipped a record quantity. However, combined shipments of the major side-dish items fell to the lowest level since 1974/75.

## **Prospects for Leading Items**

### **Green Peas**

Although processors of green peas contracted for 2 percent more acreage this year, a substantial fall in yields caused a 12-percent output decline. The bulk of the decrease occurred in Wisconsin and Washington, the leading States.

The output shortfall affected canned supplies the most. Although pack data are not yet available, this year's pack probably approximated last year's, which was the smallest since 1939. In addition, a sharply reduced carryover helped lower supplies, which are likely about 10 to 15 percent less than a year earlier and the smallest since World War II. Cannery have raised prices since last winter. In October, retail-size cases traded at about \$2 more than a year ago, while foodservice cases were up \$1.50. The tight 1983/84 supplies could augur further price advances.

The preliminary estimate of this season's frozen pack shows a 15-percent decline, but sharply higher carryin holdings left supplies down 5 percent from a year ago. Retail-size and foodservice cases in October were trading at the upper end of the price range that prevailed a year ago (table 14).

Other details on processed peas include:

- Cannery's shipments during 1982/83, at 27.3 million cases, were 1 percent less than a year earlier.
- Disappearance of frozen peas in 1982/83 (367 million pounds) totaled 5½ percent greater than the year before.
- Stocks of frozen peas on October 1 stood 2 percent below a year ago.

### **Snap Beans**

The production cutback of snap beans this year principally affected canned supplies, likely reducing the pack and supplies to their lowest level in recent memory, about 15 to 20 percent less than 1982. Cannery's list prices have



risen since summer, and in October both consumer-size and foodservice cases traded at prices about a fifth higher than a year ago (table 14). As with peas, the tight supplies of snap beans will keep upward pressure on prices throughout 1983/84.

This year's frozen supplies may be slightly smaller than 1982/83's record total, as a pack reduction probably was not offset by higher carryover stocks. October prices of retail and institutional cartons were about the same as a year earlier, and were unchanged from July. With supplies ample for the typical yearly disappearance, steady prices should prevail through at least early 1984.

Other elements of the processed snap bean situation include:

- Cannery's 1982/83 shipments totaled 52.3 million cases, 5 percent less than the previous year and the smallest since 1972/73.
- Frozen disappearance in 1982/83 reached a record-high 276 million pounds, 2 percent above the previous high set in 1981/82.
- Frozen stocks on October 1 were 276 million pounds, a moderate increase from a year ago.
- Through August 30, this year's frozen green bean pack ran 11 percent behind a year earlier.
- Wisconsin continues to be the leading production State, accounting for 35 percent of the contract output, compared with 29 percent in 1982. Oregon ranks second.

### Sweet Corn

As with peas and beans, this year's tonnage reduction of sweet corn affected canned supplies the most. The total 1983/84 pack and supplies are probably the lowest since 1974/75, as the sharply reduced pack more than offset the record-large carryover stocks. This fall, wholesale prices of retail-size cases advanced 25 to 50 cents from July quotes and topped last year's. However, in October, foodservice sizes traded at about 50 cents to \$1 less than a year ago, albeit somewhat above July's levels.

Although 1983/84 supplies of frozen sweet corn are down moderately from the 1982/83 record, they are still the second largest ever. Huge carryover stocks helped ameliorate the pack shortfall. Reflecting the abundant supplies, freezers' prices in October were generally unchanged from a year ago. The outlook suggests continued steady prices in the months ahead.

Other data on processed sweet corn include:

- Total 1982/83 canners' shipments equaled 56.6 million cases, slightly more than in 1981/82.
- Canned exports for 1982/83 (July-June) were 21 percent less than the previous year. Sweet corn is the top U.S. canned vegetable export.
- Combined 1982/83 frozen sweet corn disappearance rose 16 percent from 1981/82 to a record 707 million pounds. As a result, per capita consumption should be a record high for 1983.

● Exports of frozen sweet corn during 1982/83 came to 6 percent more than the previous year.

● Wisconsin usurped Minnesota as the leading production State this year, while Oregon overtook Washington for third place. These four States accounted for 76 percent of the total output.

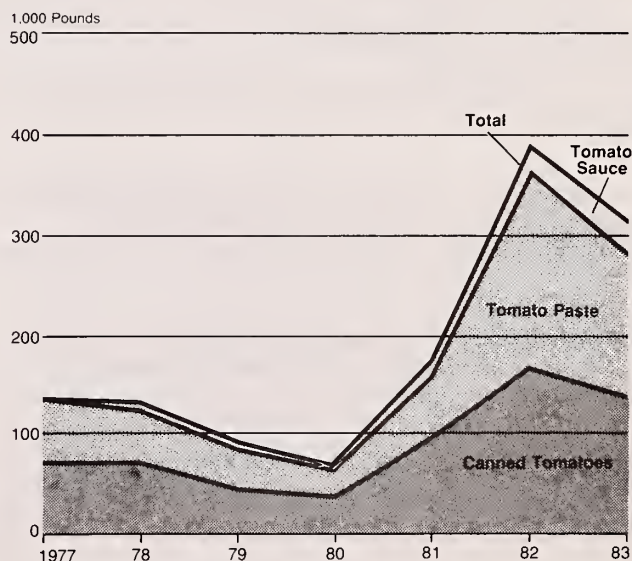
### Tomato Products

Total 1983 contract tomato production is estimated at 6.8 million tons, down from 7.1 million last year. Although processors had contracted for 7.2 million tons, slight declines in harvested area and average yields kept the output down. However, despite the lower production, sharply higher carryin stocks for most items should ensure that 1983/84 supplies will be near or even above 1982/83.

Canned tomato carryin holdings rose 64 percent to 14.1 million cases, and this suggests that even if the pack declined substantially, this year's supplies could approach last year's alltime high. California canners in October wholesaled retail-size cases of standard peeled tomatoes at prices unchanged from a year ago, while foodservice cases traded at about \$1 higher. Steady prices can be expected into early 1984.

Although this year's carryover stocks of tomato paste are six times larger than last year's almost nonexistent holdings, they made up only about 4 percent of the 1982/83 disappearance. The increased use of paste in recent years suggests another pack and supply increase for 1984. In addition, a new California plant packing only paste came on stream this year. Prices of industrial 55-gallon drums of paste have been steady in recent months at 52 cents a pound, about 4 cents less than a year ago.

### Tomato Product Imports\*



\*Based on rate of change of January-July total.



During January-July, total imports of canned tomatoes, tomato sauce, and tomato paste trailed last year by 24 percent, but they were still the second highest ever. Imports could continue to slide some, given the probable 1983/84 supplies.

The bankruptcy of California Cannery and Growers (CCG), a major cooperative tomato processor, did not cause many severe problems with the 1983 pack. Tri-Valley Growers, another cooperative, offered to pick up the production of CCG members. In addition, Tri-Valley acquired CCG's inventory and four CCG canneries.

Other developments with respect to the processed tomato outlook and situation include:

- Although 1982/83 shipments of tomato juice rose 28 percent from 1981/82, they still totaled almost a fourth lower than average for the previous 5 years.
- The 1982/83 pack, supplies, and movement of concentrated crushed or ground tomatoes and pizza sauce rose to record highs.
- Contract tomato production in States other than California fell 18 percent this year. Ohio is the second largest producer, accounting for 5 percent of the total.

### **Broccoli**

The wet spring weather in California sharply reduced the spring frozen broccoli pack and stocks. However, through the end of August the fall pack ran 37 percent ahead of a year ago. Nevertheless, October 1 stocks were still 34 percent less than a year ago, compared with 43 less percent on July 1.

The recent pack increases have eased the upward pressure on wholesale prices. Retail-size cartons of spears in October listed at \$9.95, compared with \$10.55 in July and \$8.50 to \$9 a year ago.

### **Other Processed Vegetables**

Outlook and situation information for other processed vegetables includes:

- The rainy spring weather in California reduced the spring frozen spinach pack by 20 percent. October 1 cold-storage holdings declined by 31 percent from a year earlier.
- Carrots are in ample supply, with October frozen stocks up by 33 percent from last year, while the 1983/84 canned carryin stocks rose by nearly a fourth.
- Higher carryover stocks of canned asparagus offset a moderately reduced pack to leave 1983/84 supplies virtually unchanged from a year ago.
- Pickle Packers International, a trade association, reported that its members this season processed 7 percent more cucumbers through mid-September.

## **POTATOES**

### **Outlook**

#### **Fall Crop 5 Percent Lower**

The first estimate of 1983 fall potato production is 292.7 million cwt, 5 percent less than a year ago. Low prices for the 1982 crop and a reduction in contracting by some processors lowered acreage, while this year's average yield of 278 cwt per acre is 5 cwt less than a year ago. Only 7 of the 24 reporting States reported output gains (table 23).

The Eastern States' output, at 38 million cwt, declined 19 percent from last year. Substantial acreage and yield declines contributed, with the lower yields caused by the wet spring and dry summer. The combined Eastern production is the lowest since 1949.

In the Central States, production fell 2 percent from last year to 64.8 million cwt, despite a slight increase in acreage. Production declined in the eastern portion of the region because of late plantings and the hot, dry summer. The combined output of the western parts of the central region rose because of more favorable growing conditions and larger acreage.

The Western States' crop is forecast to be 190 million cwt, 2 percent lower than last year, as a gain in the region's average yield failed to offset the lower acreage. However, the region's share of fall production rose to 65 percent from 63 percent last year.

The regional production patterns have implications for the supply of the various varieties through mid-1984. The short Eastern crop suggests that round whites, a popular chipping and table variety, will be in very short supply. Meanwhile, the higher output in Colorado, North Dakota, and Minnesota should ensure more plentiful supplies of round reds. Russet supplies should also be adequate.

Total 1983 potato production is expected to be 329.8 million cwt, more than 6 percent below last year. All four seasonal crops showed declines. The spring and summer crops showed drops of 15 and 19 percent, respectively, and were primarily affected by 1983's anomalous weather.

Fall production highlights of the individual States include:

- Maine's planted acreage was the lowest since 1903. The reduced yields there left the Maine crop the lowest since 1927. The State barely retained its ranking as the third largest U.S. producer.
- Higher yields and acreage boosted the North Dakota crop by 20 percent, moving it up to fifth from sixth in the production standings.
- South Dakota posted the sharpest output gain—50 percent—primarily because of new processing activity.
- Idaho, the nation's leading producer, did not reach its full production potential because of blight and early frost in southern and eastern counties.



- In Washington, the second-ranked producing State, output is forecast to be up slightly because of an increase in yield to 520 cwt per acre—a State and national record.

- Colorado continues to increase its output. This year's crop there is an alltime high.

### **1983 Crop Prices To Average Higher**

Grower prices typically change 4 to 5 percent for each 1 percent change in production in the opposite direction. Based on that and other supply and demand factors, the season average price to growers for the 1983 crop will probably range from \$5.25 to \$5.75 per cwt, compared with \$4.45 and \$5.41 for the 1982 and 1981 crops, respectively.

In addition to lower supplies, the current strong demand for potatoes should support higher grower prices for this year's crop. Tablestock shipments have run ahead of a year earlier throughout 1983, including a slight gain during the summer, while chippers also increased their use during July-September. In addition, preliminary data indicate relatively good movement of frozen potato products during first-half 1983. Restaurant sales are picking up and have drawn stocks down. Since processors have contracted less tonnage, they may have to step up open market purchases to maintain stocks, bidding up prices in the process.

The decline in 1983 world output (see subsequent section) could indicate that the United States will export more potatoes and/or potato products in the coming year. Alternatively, Canada may divert some of its production to export markets other than the United States. These factors could also enhance grower prices into 1984.

During fourth-quarter 1983, U.S. growers will probably receive an average of \$4.75 to \$5 per cwt, compared with \$3.73 in 1982 (table 20). Farmers garnered \$6.61 per cwt during the summer, up 20 percent from a year earlier.

### **Tablestock Prices To Average Higher**

This year's reduced fall crop and improved demand conditions portend higher wholesale and retail potato prices through mid-1984. Spring and summer crop prospects will come into play at that time.

Tablestock potato demand has been fairly strong through the first 3 quarters of 1983. Shipments from major growing areas over that period totaled about 3 percent more than a year earlier. Fueled by low prices due to larger supplies, much of the gain occurred in January-March. Shipments also rose slightly during the summer despite the lower production.

Through the first 9 months of 1983, the retail price index for fresh potatoes averaged a tenth lower than in 1982. However, prices rose steadily through September because of the drawdown of storage supplies during the winter and spring and the reduced summer crop. September's reading, at 336 (1967=100), stood 23 percent higher than a year ago (table 21). During the fall, the index will probably post a 20- to 25-percent gain from last year's low level, while for all of 1983 the index will average slightly less than the 1982 average of 296. Based on

this fall's smaller crop and likely increases in 1984 production, about a 10-percent gain can be expected in average retail prices of fresh potatoes in 1984.

### **Frozen Product Stocks Still Up, But Consumption Apparently Gains**

Frozen stocks of french fries and other potato products on October 1 totaled 650 million pounds, up 4 percent from last year. That compares with the year-to-year rises of 7 percent and 8 percent on April 1 and July 1, respectively.

During first-half 1983, processors packed 2.49 billion pounds of frozen potato products, up 5 percent from 1982 and the largest half-year total ever. As in the 2 previous years, french fries accounted for 84 percent of the total pack.

Based on the stocks and pack data, the indicated disappearance of frozen potato products during January-July rose 5 percent from a year earlier. Apparently consumer income gains and increased restaurant sales have spurred the larger consumption. In addition, the relatively large supplies since early 1982 have steadied prices. The September reading of the wholesale price index for frozen french fries stood slightly below a year ago. Although only a small portion of frozen potato products is sold through grocery stores, the average retail price of french fries has been steady during 1983 at 62 to 63 cents a pound.

Higher prices may be in prospect, however. The improved economy will likely continue to buoy restaurant and french fry sales through at least mid-1984. If processors have to step up open-market purchases, procurement costs would increase. Finally, this year's vastly reduced oil-crop production has raised prices of cooking oil, an important processing ingredient.

Potato chip demand has also apparently been strong in 1983. Through mid-October, shipments of chipper potatoes ran nearly 5 percent ahead of last year's pace. Retail prices have risen in recent months, averaging \$2.54 per pound in September, compared with \$2.40 a year earlier and \$2.47 in June. The higher raw product and cooking oil costs have helped cause the rise.

### **Canadian and World Production Down This Year**

Bad weather in different parts of the world lowered potato production this year. Northern Europe, also hit by a drought, was the most affected region. Typically, European Community (EC) countries import from each other to meet shortfalls. However, France has announced a temporary import quota of 50,000 metric tons from non-EC countries between September 17 and December 31. This is considered an exceptional measure and reflects the smaller European production. (The EC customs duty for potatoes imported from the United States amounts to 18 percent.)

Despite the world production decline, U.S. exports may not increase significantly in the coming year for the following reasons:

- The United States is not a major or traditional exporter, and the high value of the dollar makes U.S. potatoes and potato products relatively expensive.

- Spain's output rose this year, producing an estimated exportable surplus of 150,000 metric tons which could easily be marketed in the EC.

- Strict sanitary regulations preclude U.S. exports of fresh potatoes to some countries. However, frozen and dehydrated products could be in greater demand.

Canadian 1983 production is forecast at 53.5 million cwt, 13 percent less than in 1982 and the smallest since 1980. Lower yields accounted for the decline, as acreage was nearly equal to a year ago. Although it is still early in the season, Canadian shipments via Maine ports of entry through mid-October are running ahead of a year earlier. During October 1982-August 1983, U.S. imports of potatoes from Canada were down 30 percent from the previous year.

In late July, the Department of Commerce made a preliminary determination that fall-harvested round white potatoes from Canada are being or are likely to be sold in the United States at less than fair value. A final determination was to have been made by November 4. The International Trade Commission (ITC) must now determine if Canadian imports are injuring or threatening to injure U.S. potato growers. The ITC will hold a public hearing on November 18 in Portland, Maine, in conjunction with the case.

Meanwhile, at the request of a growers' trade group, the Canadian Government in September instigated a similar investigation into the dumping of U.S. potatoes in British Columbia. The investigation will determine whether Canadian growers have been injured. If so, duties will be imposed on U.S. potatoes. In 1982, U.S. potatoes comprised about 20 percent of total Canadian supplies, with 65 percent entering Western Canadian markets. Total exports to Canada during October 1981-September 1982 were 91,341 metric tons. During October 1982-August 1983, exports were off 9 percent.

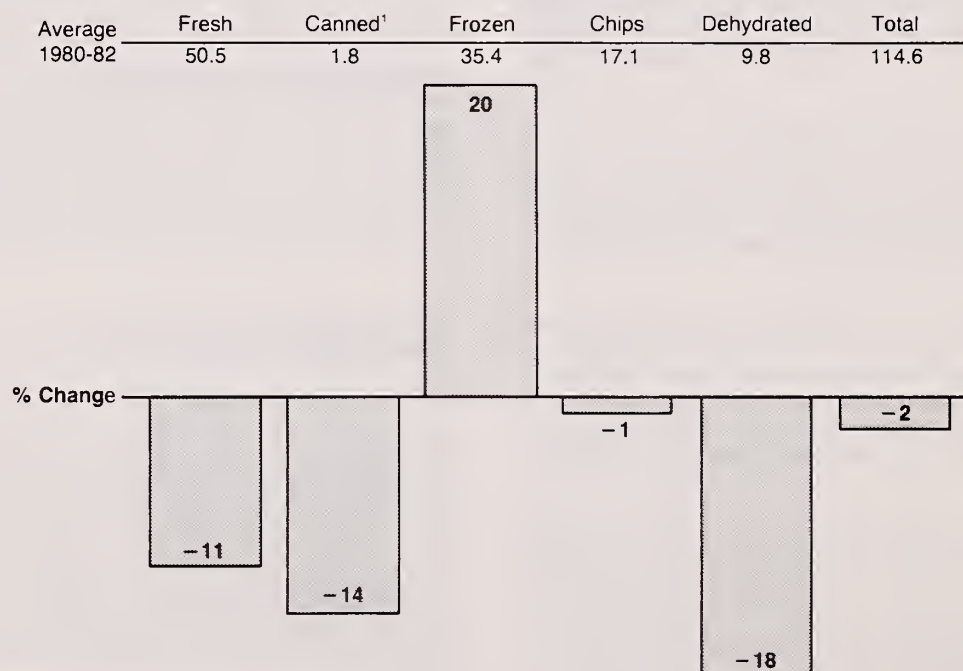
## Utilization

### Per Capita Consumption Up Slightly in 1982

Per capita consumption of potatoes during 1982 totaled 114.4 pounds (fresh-weight equivalent), up from 112.9 in 1981, but still about 4 pounds less than the 1973-82 average (table 19). Fresh use rose to 48.6 pounds from 1981's alltime low, while processed use rose slightly. A strong gain in consumption of potato chips, with smaller rises in dehydrated and canned products, offset the slight decline in frozen potato product use to boost the processed total.

Since 1960, the proportion of fresh consumption to the total has declined from over 75 percent to 42 percent in 1981 and 1982. This reflects increased away-from-home consumption and demand for convenience foods, both the

## Changes in Potato Consumption Per Capita Between 1970-72 and 1980-82\*



\*Fresh Wgt. Basis <sup>1</sup>Includes potatoes in canned soups, stews and other combinations.



result of higher real incomes and the increase in women in the labor force. Frozen potato product consumption has gained the most from this change, which in turn was aided by the advent and maturity of fast-food restaurants. It is interesting that although the product weight of per capita potato consumption has declined since 1960, the fresh-weight equivalent has actually risen.

### ***Tablestock Gain Highlights 1982 Crop Utilization***

Tablestock use from the larger 1982 crop rose to 118.6 million cwt from the 110.1 million used from the 1981 harvest (table 18). Growers and retailers lowered prices to encourage the gain in fresh use. Meanwhile, the total processed into food products fell nearly 2 percent, largely because of a moderate decline in the quantity used for frozen french fries. Processors built up stocks early in 1982 (largely with potatoes from the 1981 crop); this buildup, when combined with slowed sales, forced the lower use. However, chip processors increased their use of potatoes to a record 40.8 million cwt.

The quantity of potatoes that went for livestock feed and household use rose to 9.1 million cwt, an 80-percent gain from the 1981 crop. The sharp gain is not unusual, since livestock feed is a residual use of the potato crop and typically accompanies larger crops and lower prices. Those factors also influenced a sharp rise in the shrinkage and loss, although frost-damaged Idaho potatoes also boosted that total.

## **SWEETPOTATOES**

### ***1983 Crop Second Smallest on Record; Prices Sharply Higher***

As of October 1, 1983 sweetpotato production was estimated at 11.1 million cwt, the second smallest outturn on record and 22 percent less than a year ago (table 25). Growers responded to last season's low prices—induced by the largest crop since 1965—by reducing planted acreage to 106,800, the lowest on record. In addition, the cool, wet spring delayed planting and combined with this summer's hot and dry weather in the Southeast to lower yields to 114 cwt per acre, compared with last year's record-high 129 cwt. Production is down in all States except Texas. As the drought took its toll on the crop, the production estimate was lowered from 11.5 million cwt on August 1 to a record-low 10.5 million cwt on September 1, and then raised to the current forecast. Reflecting the delayed and reduced crop, shipments out of major growing areas through mid-October ran nearly 40 percent behind last year's pace.

Prices have moved up in response to the sharply reduced supplies. In September, growers received an average of \$11.10 per cwt, more than 50 percent above a year earlier and the highest-ever price for that month. Prices will continue to average sharply above last year. For the 1983 crop, grower prices will likely average between \$13 and \$15 per cwt, compared with \$7.90 in 1982 (table 26). (Season average prices achieved a record high of \$13.60 for the 1980 and 1981 crops.) Similarly, terminal wholesale market prices in late October were sharply above a year ago.

### ***1982/83 Canned Shipments Decline***

During 1982/83, canners shipped 6.55 million cases (basis 24/303), 5 percent less than in 1981/82 and the lowest total since 1971/72, when marketing year data were first collected (table 27). Government purchases during fiscal year 1983 for use in school lunch and other Federal programs totaled 531,600 cases. Meanwhile, the 1982/83 pack declined 11 percent.

The 1983/84 carryin holdings rose sharply to 2.1 million cases, a third more than in 1982/83. That should at least partially offset a prospective pack decline because of the smaller crop. Supplies the past 3 years have totaled 8.6 to 8.7 million cases. The size of this year's pack could help determine grower prices through the 1984/85 season (see following section).

With tighter supplies in prospect, canners' prices have firmed since spring. In October, potatoes (24/303) in sirup traded at \$11.50 per case, down from \$12 last year. Similarly, prices of foodservice cases have dropped.

### ***High Prices Could Carry Over Into 1984 Crop Year***

In the recent past, a short crop has tended to prop up sweetpotato prices in the subsequent crop marketing year. This has occurred primarily because of developments in the canning segment of the industry. Substantial crop reductions in 1977 and 1980 cut back canned sweetpotato packs and supplies, which in turn left 1978 and 1981 carryover stocks at about 8 percent of use, compared with the 10-year average of 24 percent. As a result, canners' efforts to build up stocks to more normal levels in the year after the short harvest maintained grower price strength. Growers garnered an average of \$10.50 and \$10.60 per cwt for the 1977 and 1978 crops, respectively, while the 1980 and 1981 crops both returned \$13.60.

With this year's small outturn, another 2-year period of sustained high prices may be in the offing. However, like consumption of other canned vegetables, canned sweetpotato consumption has trailed off in recent years. For the 3 most recent marketing years, canners' shipments averaged 7.2 million cases, compared with 10.8 million a decade earlier. Based on 1983/84 shipments of 7.2 million cases, the 1984/85 carryin would probably be substantially higher than the drawn down carryin stocks of 1978/79 and 1981/82. Therefore, 1984 season prices may not match the expected 1983 season levels.

### ***83 Percent of 1982 Crop Sold***

Of the 1982 crop—which totaled 14.3 million cwt and was the largest harvest since 1965—the proportion sold fell to 83 percent from 85 percent the previous season. Seed use declined, reflecting the cutback in 1983 plantings, while that portion of the crop used on the farm and the shrinkage and loss rose. Although actual sales rose 9 percent, sharply lower prices yielded a 1982-crop farm sales value of \$94 million, down from \$148 million the previous year.

The quantity taken by canners during 1982/83 totaled an estimated 2.5 million cwt, or 17 percent of the crop, com-



pared with 2.8 million cwt and 22 percent during 1981/82. Although taking only about 3 percent of production, or 400,000 cwt, processors of frozen sweetpotato products during 1982 packed a record-high 21 million pounds. The frozen pack has almost trebled from the early 1970's. Meanwhile, arrivals of sweetpotatoes in major terminal markets (an indicator of fresh market use) rose 11 percent during 1982/83 from the previous year.

### **Per Capita Consumption Highest Since 1976**

Per capita consumption of sweetpotatoes in 1982 totaled 5.0 pounds (fresh-weight equivalent), up from 4.5 in 1981 and the highest since 1976 (table 28). The large 1982 crop spurred a sharp increase in fresh consumption and accounted for the rise. In the past decade, fresh consumption has typically varied with production. However, canned consumption continued its downward slide in 1982 and fell to the lowest since 1960—0.7 pound.

## **MUSHROOMS**

### **1982/83 Output Down**

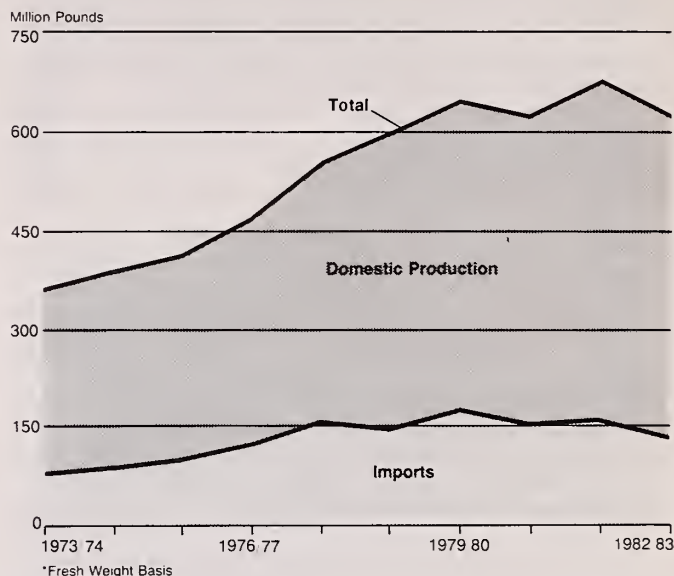
U.S. mushroom growers produced 491 million pounds in 1982/83, 5 percent less than the previous year's record high (table 29). However, the industry's structural change from a processing to a fresh market orientation continued. Fresh market output rose 6 percent and accounted for 69 percent of the total outturn, compared with 30 percent in 1972/73 and 48 percent in 1977/78. Meanwhile, production for processing fell by over 20 percent to its lowest level since 1970/71. These industry patterns mirror increased domestic consumption of fresh vegetables and the competitive disadvantage of American canned processors relative to those in Asia.

During 1982/83, the average grower price rose to a record-high 88 cents per pound, up from 81 cents in 1981/82. Prices of mushrooms for both the fresh market and processors gained. Fresh market sales yielded an average \$1 a pound and processing mushrooms 61 cents. The higher average prices pushed the value of sales to an alltime high of \$431 million. Of all the vegetable-type crops, only potatoes, lettuce, fresh-market tomatoes, and processing tomatoes are higher valued.

For 1983/84, growers intend to fill 140 million square feet of bed or tray area, compared with 135 million in 1982/83. In addition, yields have climbed steadily over the past 20 years. These data suggest production this year could rise and approach the 1981/82 record outturn of 517 million pounds. The trend toward more fresh market production will probably continue. Grower and retail prices of fresh mushrooms have been fairly stable in recent years, and may continue so in the coming year if the prospective higher production materializes.

The fresh industry has tended toward larger, more efficient production facilities in recent years. These plants are quite often owned by large food processing companies. The need to generate production and sales volume to realize the associated economies of size of the newer plants could add to price stability in the coming years.

## **Total Mushroom Supplies\***



Canned imports in 1983/84 will probably match or exceed a year earlier (see following section). As a result, processing grower prices as well as wholesale and retail prices of canned mushrooms will also likely be steady in the coming year.

Other details of the 1982/83 production year include:

- Pennsylvania continues as the largest production State, accounting for 50 percent of the total output.
- In 1982/83, Pennsylvania produced more fresh-market mushrooms than processing mushrooms for the first time since the mid-1950's.
- Among regions, the East produced 61 percent of the total, the Central States 12 percent, and the West 27 percent.
- Of the individually reported States, California growers received the highest average price (\$1.11 a pound) and New Jersey the lowest (62.8 cents).

### **1982/83 Imports Up Sharply<sup>1</sup>**

U.S. imports of canned mushrooms during 1982/83 totaled 51,469 metric tons, a 19-percent gain from 1981/82 (tables 32 and 33). A decline in domestic production, lower average import prices, and the exemption of certain mushrooms from the increased import duty spurred the rise.

The temporary higher duty, in effect since November 1980 to provide import relief to the U.S. industry, had

<sup>1</sup>This section is primarily based on "World Mushroom Situation" in the September 1983 issue of Foreign Agriculture Circular: Horticultural Products, published by USDA's Foreign Agricultural Service.



been somewhat effective in stemming the flow of imports into the United States. However, that measure's effectiveness was severely eroded during 1982/83 because of the exemption of certain specialty mushrooms. These exempt categories had been expected to encompass only 5 to 10 percent of U.S. imports during 1982/83, but actually accounted for 92 percent.

Interested U.S. parties petitioned the International Trade Commission (ITC) in April 1982 to investigate the probable economic impact of the import relief termination, slated for November 1, 1983. However, this petition was withdrawn in June 1983.

In May, the International Trade Administration (ITA) made a preliminary determination that canned mushrooms from China were being sold in the United States at less than fair value. The ITA has since made a final determination that reversed the preliminary one. That ends the anti-dumping case.

### ***Per Capita Consumption Reaches Record High***

Per capita consumption of all mushrooms during 1982/83 totaled 3.0 pounds (fresh-weight equivalent), as Americans consumed a record amount of fresh and processed (tables 30 and 31). Fresh consumption rose to 1.5 pounds—an alltime high. Fresh mushroom consumption is riding the wave that has boosted all fresh vegetable consumption in the past 10 years. Canned consumption rose to 0.9 pounds (1.4 pounds fresh weight) because of increased imports. Although per person consumption of frozen mushrooms is minute—0.1 pound—it is notable that the frozen mushroom pack rose 165 percent between 1978 and 1982. Most frozen mushrooms are used in other frozen vegetable combinations, but such an item as breaded mushrooms has found some recent popularity for restaurant use.

## **PULSES**

### **Dry Edible Beans**

#### ***Production Lowest Since 1967; Prices Up Sharply***

As of October 1, the 1983 dry bean crop was forecast at 15.5 million cwt, 38 percent less than last year and 52 percent lower than the record 1981 harvest (table 34). This year's outturn is the smallest since 1967. A 37-percent cutback in harvested area—to 1.14 million acres, the smallest area since 1921—and a slight decline in the average yields contributed to the sharp production downturn. Production fell in all States, indicating output declines for all classes except lima beans, which were unchanged from last year.

Low grower prices for the 1982 crop primarily influenced the huge plantings decline. Producers received an average of \$13.80 per cwt—the lowest price since 1972—for the 1982 crop, contrasted with \$21 and \$27.60 for the 1981 and 1980 harvests, respectively (table 35). Sharply reduced export sales pressured prices downward. Provisions of this year's Federal acreage reduction programs also contributed to the lower acreage.

With tighter supplies, prices have moved up sharply. The September average grower price, at \$24.40 per cwt,

stood 68 percent above last year's low level, and doubled the prices prevalent earlier in 1983. In mid-October, all classes traded at sharply higher prices than a year ago, with navy beans displaying the most strength (table 37).

Given this year's much smaller crop, prices should remain buoyant through the 1983/84 marketing season. Improved export potential could also bolster prices. ERS forecasts that the 1983 season-average farm price will range from \$22 to \$28 per cwt. For fourth-quarter 1983, growers will likely receive \$20 to \$25 per cwt.

### ***Exports Unlikely To Gain***

The lessened availability of U.S. supplies will limit 1983/84 exports. In addition to the higher U.S. crop prices, the continued strength of the U.S. dollar further inflates the price. Worldwide economic conditions will also affect sales to foreign countries. In general, prospects for 1983 and 1984 economic growth are projected to be fairly good in many Asian developing nations, but less favorable for those in Africa and Latin America.

Smaller crops in Argentina and Canada, which are U.S. competitors, in addition to drought in South Africa and a very small crop in Venezuela, are pluses in the export outlook. However, Mexico's 1983/84 crop is projected at about 1 million metric tons, a 25-percent gain over 1982/83, and their imports in the coming year are estimated at only 10,000 tons, reflecting minimal border trade.

During the 1982/83 marketing year (September-August), U.S. exports of dry beans totaled 284,000 metric tons (25 percent of the 1982 crop), compared with 768,000 metric tons in 1981/82 (53 percent of the 1981 crop) (table 37). A decline in sales of pinto and black beans accounted for most of the drop. Sales of those beans totaled less than 10 percent of the year-earlier level. The United States exported large quantities of those classes to Mexico during 1981/82. Navy bean exports rose 11 percent to 89,000 metric tons and replaced pinto beans as the most popular export class during the past season. Navy beans were the only class to post a year-to-year rise.

### **Dry Peas and Lentils**

#### ***Pea Production Down Moderately, Lentils Sharply***

The American Dry Pea and Lentil Association estimates this year's dry pea production at 396 million pounds, compared with 1982 output of 357 million. Higher yields offset reduced acreage to boost output. Meanwhile, lentil production fell 40 percent to 94 million pounds, largely because of a huge plantings cutback. Grower prices during 1982/83 averaged lower for all classes, which may have prompted the plantings reduction. In addition, acreage of these crops exhibits wide year-to-year fluctuations because of their use in wheat-fallow ground-legume crop rotations (table 39).

Exports of dry peas during 1982/83 rose over 30 percent, while lentil exports fell by a similar percentage. Increased competition from Canada and Turkey in world lentil markets limited U.S. exports, while the lower prices for peas may have boosted sales of those classes. Processors' 1982/83 shipments of dry peas and lentils into domestic markets, meanwhile, reached a record-high 112 million pounds

**Table 1.—Growers' cash receipts from vegetable marketings**

Crop	1977	1978	1979	1980	1981	1982	1983 <sup>1</sup>
<i>Million dollars</i>							
Potatoes	1,196	1,149	1,061	1,387	1,578	1,618	1,664
Sweetpotatoes	97	117	121	114	141	116	142
Dry beans	327	297	391	608	811	430	338
Tomatoes	908	809	1,021	918	932	1,146	1,140
Lettuce	416	597	564	565	677	722	760
Onions	258	249	316	294	507	384	345
Mushrooms	277	332	324	369	363	415	445
Other	2,407	2,722	2,980	3,398	3,806	3,673	3,916
Total	5,886	6,272	6,778	7,653	8,815	8,504	8,750

<sup>1</sup>Forecast.

SOURCE: Economic Research Service.

**Table 2.—Indexes of prices paid and received by vegetable growers**

Year	Prices paid	Prices received			
	Parity index <sup>1</sup>	Commercial vegetables	Ratio <sup>2</sup>	Potatoes, etc. <sup>3</sup>	Ratio <sup>2</sup>
	1977=100	1977=100		1977=100	
1970	55	59	107	60	109
1971	58	65	112	56	97
1972	62	65	105	62	100
1973	71	76	107	106	149
1974	81	81	100	150	185
1975	89	92	103	108	121
1976	95	91	96	104	110
1977	100	100	100	100	100
1978	108	105	97	104	96
1979	123	110	89	92	75
1980	138	113	82	129	94
1981	150	136	91	177	118
1982	156	127	81	125	80
1983 <sup>4</sup>	160	130	81	126	79

<sup>1</sup>Prices paid by farmers for commodities and services, interest, taxes, and wages. <sup>2</sup>Ratio of index of prices received to index of prices paid. <sup>3</sup>Includes sweetpotatoes and dry edible beans. <sup>4</sup>ERS forecast.

**Table 3.—Economic indicators affecting vegetable demand and prices**

Item	Time period	Percent change from year earlier
Retail sales	Jan.-Aug. 1983	
Grocery stores		+4.8
Fruit stores and vegetable markets		-1.2
Eating and drinking places		+12.1
Indicated retail volume	Jan.-Aug. 1983	
Grocery stores		+3.7
Fruit stores and vegetable markets		+2.3
Eating and drinking places		+7.3
Personal consumption expenditures		
Food and beverages (1972 dollars)	1983	+3
	1984	+2
Per capita disposable income	1983	+2
	1984	+3
Retail price indexes	Jan.-Sept. 1983	
All food		+2.1
Fresh vegetables		-1.3
Processed vegetables		-0.2
Farm-retail price spread indexes	Jan.-Sept. 1983	
Market basket		+3.4
Fresh vegetables		-2.2
Processed fruits and vegetables		+4.3
Farm value/retail price ratio	Jan.-Sept. 1983	
Market basket		-4.6
Fresh vegetables		+1.6
Processed fruits and vegetables		-16.9
ERS Marketing Cost Index	Jan.-Sept. 1983	+2.5



**Table 4.—Fresh vegetables: Reported acreage of principal crops**

Seasonal group and crop	Prospective area for harvest		
	1982 major States	1983	
		Indicated major States	Percent of 1982
	1,000 acres		Percent
Winter	134.3	154.8	115
Spring	166.6	159.3	96
Summer	280.3	277.2	99
Fall			
Broccoli <sup>1</sup>	21.4	22.9	107
Carrots <sup>1</sup>	12.1	10.8	89
Cauliflower <sup>1</sup>	15.4	15.8	103
Celery <sup>1</sup>	9.2	7.5	82
Sweet corn	14.7	13.6	93
Lettuce	62.9	63.2	100
Tomatoes	11.7	12.9	110
Honeydew melons	5.0	3.4	68
Total 8 vegetables <sup>2</sup>	152.4	150.1	98

<sup>1</sup>Includes fresh market and processing. <sup>2</sup>May not add to total because of rounding.

SOURCE: Vegetables, SRS, USDA.

**Table 5.—Shipments of major fresh vegetables and melons, July-Sept.**

Item	Year		1983 as percentage of 1982
	1982	1983	
	1,000 cwt		
Lettuce	14,245	14,392	101
Tomatoes	4,657	4,758	102
Onions	6,621	6,738	102
Celery	3,048	3,077	101
Carrots	2,284	2,181	95
Cabbage	1,197	1,234	103
Peppers	969	1,094	113
Cucumbers	740	1,342	181
Sweet corn	1,205	1,295	108
Broccoli	958	1,121	117
Cauliflower	646	717	111
Total	36,570	37,949	104
Watermelon	7,922	9,767	124
Cantaloup	7,475	7,781	104
Honeydews	2,230	2,363	106
Total	17,627	19,911	113
Grand total	54,197	57,860	107

SOURCE: AMS, USDA, Fresh Fruits and Vegetables: Weekly Summary of Shipments and Arrivals.

**Table 6.—Fresh vegetables: Grower and retail price indexes**

Year	1st	2nd	3rd	4th	Annual
Grower prices (1977=100)					
1973	81	98	74	64	79
1974	73	83	73	81	77
1975	85	93	83	90	88
1976	93	80	86	92	88
1977	128	93	84	96	100
1978	107	129	94	94	106
1979	134	105	95	101	109
1980	100	116	104	119	110
1981	163	127	121	128	135
1982	156	117	99	108	120
1983	119	145	115	<sup>2</sup> 130	<sup>2</sup> 127
Retail prices (1967=100) <sup>1</sup>					
1973	151	167	151	137	152
1974	150	160	152	151	153
1975	168	169	165	160	166
1976	170	168	165	179	170
1977	221	216	178	184	200
1978	212	247	209	204	218
1979	254	224	211	226	229
1980	220	250	231	253	239
1981	287	275	258	248	267
1982	341	302	250	257	288
1983	292	327	283	<sup>2</sup> 290	<sup>2</sup> 298

<sup>1</sup>Excludes potatoes. <sup>2</sup>Unofficial ERS projection.

SOURCE: Grower Index: Agricultural Prices, SRS, Retail index: ERS index derived from Consumer Price Index.

**Table 7.—Fresh vegetables: Average U.S. f.o.b. shipping point prices**

Commodity	1982		1983		
	September	October	August	September	Oct. 1-15
	Dollars per cwt				
Carrots	10.70	9.76	16.80	15.50	15.20
Celery	10.30	8.39	13.10	13.20	11.90
Sweet corn	10.80	12.10	11.60	11.40	14.20
Lettuce	7.74	9.17	11.20	13.20	19.00
Onions	7.83	7.12	10.90	11.60	11.40
Tomatoes	17.00	20.10	17.80	18.80	26.10

SOURCE: Agricultural Prices, SRS, USDA.

**Table 8.—Fresh vegetables: Wholesale prices at New York and Chicago**

Market and commodity	State of origin	Unit	Tuesday			
			1982		1983	
			Sept. 7	Oct. 5	Sept. 6	Oct. 4
Dollars						
New York						
Broccoli	California	14's crt.	9.50	9.50	11.50	13.00
Cabbage, domestic round type	New York	Various crates	4.25	3.50	—	6.25
Cantaloups	California	Jumbo crt. 36's	7.25	9.50	9.00	9.00
Carrots, topped washed	California	48 1-lb. film bag, ctn.	8.50	8.50	10.00	10.50
Cauliflower	California	Crt. 12's	12.00	—	14.00	9.50
Celery, Pascal	New York	2-3 doz.	—	—	—	—
Celery, Pascal	California	2-3 doz.	13.00	8.50	14.00	4.00
Corn, sweet	New York	5 doz. crate	4.75	5.00	5.50	—
Cucumbers	Long Island	Bu. bskt.	5.50	7.50	8.50	16.00
Lettuce, Iceberg	California	2 doz. cnt.	6.75	9.25	11.00	14.00
Onions, yellow Spanish large	Idaho-Oregon	50 lb. sack	—	8.25	—	—
Onions, yellow globe medium	New York	50 lb. sack	4.00	3.75	7.50	6.50
Chicago						
Beans, snap green round green	Illinois	Bu. hamper	8.00	9.50	15.00	14.00
Broccoli	California	14's crt.	8.00	9.25	10.00	11.50
Cabbage, domestic round type	Illinois	Various crates	4.00	3.50	—	6.25
Cantaloups	California	Jumbo crt., 36's	6.25	—	8.25	10.00
Cauliflower	California	Ctns., film wrpd., 12's	10.50	9.50	13.50	12.00
Celery, Pascal	California	2-4 doz.	10.50	9.60	13.50	12.00
Cucumbers	Illionis	Bu. bskt.	7.25	—	—	—
Green peppers	Illinois	Bu. bskt., large	5.75	—	6.50	—
Honeydews	California	Crts., 5-8's	6.50	6.00	6.25	7.00
Lettuce, Iceberg	California	2 doz. ctn.	7.50	9.00	10.50	14.50
Onions, yellow Spanish large	Idaho-California	50 lb. sack	6.75	—	6.25	—
Onions, yellow globe medium	Midwestern	50 lb. sack	5.75	4.75	7.60	7.00
Tomatoes, green, ripe and turning, med.-lge.	California	25 lb. ctn.	6.75	8.75	8.00	10.50

SOURCE: Weekly Summary of Terminal Market Prices, AMS, USDA.

**Table 9.—Onions: Acreage, yield, and production**

Crop and State	Area		Yield per acre		Production	
	Harvested	For harvest				
	1982	1983	1982	1983	1982	1983
	<i>Acres</i>		<i>Cwt</i>		<i>1,000 cwt</i>	
Spring <sup>1</sup>	29,000	25,500	247	244	7,173	6,210
Summer Nonstorage <sup>1</sup>	12,250	9,650	293	278	3,592	2,679
Storage						
Colorado	9,300	9,100	350	310	3,255	2,912
Idaho & Oregon	14,900	15,200	490	508	7,296	7,718
Michigan	7,300	7,300	320	310	2,336	2,263
New York	14,000	13,300	325	210	4,550	2,793
Other <sup>2</sup>	8,770	8,770	347	351	3,040	3,080
Subtotal	54,270	53,670	377	349	20,477	18,766
California <sup>3</sup>	29,700	26,100	350	330	10,395	8,613
Total summer	96,220	89,420	358	336	34,464	30,058
United States	125,220	114,920	333	316	41,637	36,268

<sup>1</sup>Primarily fresh market. <sup>2</sup>Includes Minnesota, Ohio, Utah, Washington, and Wisconsin. <sup>3</sup>Primarily for processing.

SOURCE: Vegetables, SRS, USDA.



**Table 10.—Fresh vegetables: Retail price, marketing margin, and grower and packer return per unit, sold in Baltimore, indicated months, 1982 and 1983**

Commodity, month, and retail unit	Retail price <sup>1</sup>	Marketing margin		Grower and packer return (F.o.b. shipping point prices) <sup>2, 3</sup>	
		Absolute	Percentage of retail price	Absolute	Percentage of retail price
	Cents	Cents		Cents	
Carrots (lb.)					
July 1983	37.0	24.6	66	12.4	34
June 1983	36.0	27.4	76	8.6	24
July 1982	42.0	33.4	79	9.0	21
Celery (lb.)					
July 1983	46.6	31.4	67	15.2	33
June 1983	41.9	26.7	64	15.2	36
July 1982	44.2	32.4	73	11.9	27
Lettuce					
July 1983	109.0	94.4	87	14.6	13
June 1983	89.0	48.7	55	40.3	45
July 1982	70.0	55.4	79	14.6	21
Onions (lb.)					
July 1983	32.0	25.1	78	6.9	22
June 1983	35.0	24.4	70	10.6	30
July 1982	36.0	29.6	82	6.4	18

<sup>1</sup>Retail prices from Maryland Department of Agriculture. <sup>2</sup>For quantity of product equivalent to retail unit sold to consumers; because of waste and spoilage during marketing, equivalent quantity exceeds retail unit. <sup>3</sup>Production areas: carrots-California, celery-California, lettuce-California, onions-Texas.

**Table 11.—Processed vegetables: Retail price, marketing margin, and grower and packer return per unit, sold in Baltimore, indicated months, 1982 and 1983**

Commodity, month, and retail unit	Retail price <sup>1</sup>	Marketing margin		Grower and packer return (F.o.b. shipping point prices) <sup>2, 3</sup>	
		Absolute	Percentage of retail price	Absolute	Percentage of retail price
	Cents	Cents		Cents	
Beans (frozen) 9 oz.					
July 1983	53.0	47.4	89	5.6	11
April 1983	56.0	50.4	90	5.6	10
July 1982	58.0	52.5	91	5.5	9
Corn (canned) 303					
July 1983	53.0	45.7	86	7.3	14
April 1983	53.0	45.7	86	7.3	14
July 1982	47.0	39.0	83	8.0	17
Corn (frozen) 10 oz.					
July 1983	61.0	53.0	87	8.0	13
April 1983	61.0	53.0	87	8.0	13
July 1982	62.0	54.4	88	7.6	12
Peas (canned) 303					
July 1983	48.0	40.2	84	7.8	16
April 1983	44.0	36.2	82	7.8	18
July 1982	45.0	37.1	82	7.9	18
Peas (frozen) 10 oz.					
July 1983	64.0	56.4	88	7.6	12
April 1983	63.0	55.4	88	7.6	12
July 1982	63.0	55.8	89	7.2	11
Tomatoes (canned) 303					
July 1983	52.1	46.9	90	5.2	10
April 1983	51.9	46.7	90	5.2	10
July 1982	55.6	50.7	91	4.9	9

<sup>1</sup>Retail prices from Maryland Department of Agriculture. <sup>2</sup>For quantity of product equivalent to retail unit sold to consumers; because of waste and spoilage during marketing, equivalent quantity exceeds retail unit. <sup>3</sup>Production area: beans (frozen) Western; corn (canned) Northwest; corn (frozen) Western; peas (sweet canned) Midwest; peas (frozen) West; tomatoes (canned) California.

**Table 12.—Harvested acreage and production of commercial vegetables for processing**

Commodity	Harvested <sup>1</sup>			Production <sup>1</sup>			1983 as percentage of 1982
	1981	1982	1983	1981	1982	1983	
	1,000 acres			1,000 tons			Percent
Snap beans	218.3	192.1	186.3	672.2	611.0	510.6	84
Sweet corn	401.0	445.3	407.3	2,378.2	2,736.5	2,171.6	79
Green peas	293.1	304.1	311.0	455.1	521.2	457.8	88
Tomatoes	253.9	285.8	283.9	5,716.1	7,093.3	6,867.0	97
Total <sup>2</sup>	1,166.3	1,227.3	1,188.5	9,221.6	10,962.0	10,007.0	91

<sup>1</sup>Contract. <sup>2</sup>May not add to total because of rounding.

SOURCE: Vegetables, SRS, USDA.

**Table 13.—Processed vegetables: Quarterly retail and wholesale price indexes**

Year	1st	2nd	3rd	4th	Annual
<i>Retail price index of processed vegetables (December 1977=100)</i>					
1978	101.7	102.8	104.6	106.0	103.8
1979	107.5	108.5	110.8	111.2	109.5
1980	113.9	115.3	118.8	122.0	117.5
1981	125.6	130.4	135.4	136.1	131.9
1982	137.8	138.8	140.1	138.7	138.9
1983	137.9	138.1	<sup>1</sup> 139.9	<sup>1</sup> 142.0	<sup>1</sup> 139.5
<i>Wholesale price index of canned vegetables (1967=100)</i>					
1978	173.4	177.1	181.3	183.0	178.7
1979	184.0	185.6	189.1	188.0	186.7
1980	186.8	190.6	198.9	207.3	195.9
1981	213.7	223.5	232.1	239.0	227.1
1982	241.7	242.9	241.8	241.9	241.8
1983	242.9	243.9	248.0	<sup>1</sup> 250.0	<sup>1</sup> 246.0
<i>Wholesale price index of frozen vegetables (1967=100)</i>					
1978	196.3	197.4	203.4	206.2	200.9
1979	206.1	207.6	213.5	216.5	210.9
1980	214.6	220.5	227.5	226.6	222.3
1981	228.7	249.7	263.0	270.8	253.1
1982	275.7	278.7	282.2	283.5	280.0
1983	284.1	284.1	284.1	<sup>1</sup> 285.0	<sup>1</sup> 284.7

<sup>1</sup>Unofficial ERS projection.

SOURCE: Consumer Price Index and Producer Price Index, Bureau of Labor Statistics.

**Table 14.—Processed vegetables: Wholesale prices of selected items<sup>1</sup>**

Commodity	Oct. 1982	Oct. 1983	Percent change from a year earlier
	<i>Dollars per case</i>		<i>Percent</i>
CANNED VEGETABLES:			
Snap beans			
24/303	5.50	6.50-6.75	120
6/10	8.25-8.50	9.50-9.75	115
Sweet corn			
24/303	7.25-7.50	8.00-8.25	110
6/10	12.50-13.00	12.50	98
Green peas			
24/303	6.25	8.25-8.50	134
6/10	10.00-10.25	11.75-12.00	117
Whole tomatoes			
24/303	7.75	7.75-8.00	103
6/10	11.25	12.25	109
Tomato paste			
6/10	20.25-20.50	24.10	118
55-gallon drums (cents per pound)	.56-.60	.52	90
FROZEN VEGETABLES <sup>1</sup> :			
Snap beans			
Retail	7.35-7.95	7.95	104
Foodservice	.45-.50	.45-.50	100
Sweet corn, cut			
Retail	7.20-7.80	7.80	104
Foodservice	.46-.49	.49	103
Sweet corn, cob			
Retail	9.85-9.88	9.85-9.88	100
Foodservice	9.38-9.40	9.38-9.40	100
Green peas			
Retail	7.60-8.20	8.20	104
Foodservice	.48-.51	.51	103
Broccoli, spears			
Retail	8.50-9.00	9.95	114
Foodservice	.52-.57	.50-.55	96

<sup>1</sup>Retail-size prices are dollars per case of 24/10-ounce (or 9-ounce) packages. Foodservice case prices are in terms of dollars per pound for 12/2-1/2 pound packages.

SOURCE: American Institute of Food Distribution.



**Table 15.—Canned vegetables: Carryover, pack, seasonal supply, and disappearance**

Commodity and season	Carry-over	Pack	Seasonal supply	Total seasonal shipments
<i>Million cases 24/303's</i>				
Lima beans				
1979-80	.5	3.1	3.6	3.0
1980-81	.6	2.8	3.4	2.8
1981-82	.7	2.6	3.3	2.7
1982-83	.5	2.3	2.8	2.5
1983-84	.3			
Snap beans				
1979-80	6.2	65.1	71.3	60.0
1980-81	11.3	60.9	72.2	56.3
1981-82	15.9	51.6	67.5	55.1
1982-83	12.4	47.8	60.2	52.3
1983-84	7.8			
Beets				
1979-80	2.9	15.1	18.0	11.3
1980-81	6.7	11.3	18.0	12.2
1981-82	5.8	9.6	15.4	11.3
1982-83	4.1	10.2	14.3	10.7
1983-84	4.3			
Sweet corn				
1979-80	9.8	60.0	69.8	60.1
1980-81	9.7	50.6	60.3	55.6
1981-82	4.7	57.9	62.6	55.3
1982-83	7.3	60.5	67.8	56.6
1983-84	11.2			
Green peas				
1979-80	1.6	36.5	38.1	31.9
1980-81	6.2	30.1	36.3	30.1
1981-82	6.2	27.3	33.5	27.7
1982-83	5.8	24.8	30.6	27.3
1983-84	3.2			
Sauerkraut				
1979-80	2.2	11.7	13.9	11.5
1980-81	2.4	10.8	13.2	11.2
1981-82	2.0	12.1	14.1	10.9
1982-83	3.2	10.9	14.1	9.9
1983-84	4.2			
Tomato juice				
1979-80	6.2	31.5	37.7	31.2
1980-81	6.5	27.6	34.1	31.1
1981-82	3.0	17.5	20.5	17.3
1982-83	3.2	24.0	27.2	22.2
1983-84	5.0			
Tomatoes				
1979-80	14.6	52.1	66.7	54.4
1980-81	12.3	53.1	65.4	55.2
1981-82	10.2	52.8	63.0	54.4
1982-83	8.6	63.1	71.7	57.2
1983-84	14.1			
Total				
1979-80	44.0	275.1	319.2	263.5
1980-81	55.7	247.2	302.9	254.2
1981-82	48.5	231.4	279.9	235.9
1982-83	45.1	243.4	288.5	238.7
1983-84	50.1	<sup>1</sup> 210-225	<sup>1</sup> 260-275	

<sup>1</sup>ERS projections.

SOURCE: National Food Processors Association and National Kraut Packers Association.

**Table 16.—Frozen vegetables: Carryover, pack, seasonal supply, and disappearance**

Commodity and season	Carry-over	Pack	Seasonal supply	Total seasonal shipments
<i>Million pounds</i>				
Broccoli				
1979-80	60.2	298.6	358.8	280.1
1980-81	78.7	290.7	369.4	293.1
1981-82	76.3	306.8	383.1	327.6
1982-83	55.5	335.5	391.0	302.5
1983-84	88.5			
Lima beans				
1979-80	42.3	124.3	166.6	108.0
1980-81	58.6	85.9	144.5	120.5
1981-82	24.0	88.8	112.8	98.8
1982-83	14.0	123.7	137.7	110.3
1983-84	27.4			
Snap beans				
1979-80	73.4	273.3	346.8	255.6
1980-81	91.2	243.9	335.1	254.3
1981-82	80.9	257.4	338.3	269.5
1982-83	68.7	293.3	362.1	275.7
1983-84	86.4			
Cauliflower				
1979-80	44.3	101.1	145.4	104.8
1980-81	40.6	84.8	125.4	97.8
1981-82	27.6	105.2	132.8	109.5
1982-83	23.3	111.6	134.9	98.6
1983-84	36.3			
Carrots				
1979-80	75.6	263.1	338.7	245.2
1980-81	93.5	191.2	284.7	227.3
1981-82	57.4	269.8	327.2	252.2
1982-83	75.0	296.7	371.7	228.9
1983-84	142.8			
Sweet corn				
1979-80	154.8	580.1	734.9	614.6
1980-81	120.3	529.1	644.4	594.6
1981-82	54.8	619.4	674.2	610.2
1982-83	64.0	834.3	898.3	706.0
1983-84	192.3			
Green peas				
1979-80	82.9	427.5	510.4	387.9
1980-81	122.5	315.6	438.1	369.2
1981-82	68.8	333.9	402.7	347.7
1982-83	55.0	404.8	459.8	367.3
1983-84	92.5	344.2	436.7	
Spinach				
1979-80	19.1	181.3	200.4	170.0
1980-81	30.3	169.3	199.6	166.6
1981-82	33.1	183.6	216.7	176.0
1982-83	40.7	150.7	191.4	162.7
1983-84	28.7			
Total				
1979-80	552.6	2,249.3	2,802.0	2,166.3
1980-81	635.7	1,910.5	2,546.2	2,123.3
1981-82	422.9	2,164.9	2,587.8	2,191.5
1982-83	396.3	2,550.6	2,946.9	2,252.0
1983-84	694.9	<sup>1</sup> 2,150-2,200	<sup>1</sup> 2,850-2,900	

<sup>1</sup>ERS projections.

SOURCES: Carryover, Statistical Reporting Service; Pack, American Frozen Food Institute.

**Table 17.—Frozen vegetables: Cold storage holdings**

Commodity	Oct. 1			Percent change from a year earlier
	1981	1982	1983 <sup>1</sup>	
	<i>Million pounds</i>			<i>Percent</i>
Asparagus	9	11	10	91
Lima beans	62	82	91	111
Snap beans	233	260	276	106
Broccoli	104	130	86	66
Brussels sprouts	25	18	15	83
Carrots	48	93	124	133
Cauliflower	38	47	51	108
Sweet corn	412	597	620	118
Mixed vegetables	41	48	50	104
Okra	38	58	63	109
Onions	26	29	28	97
Blackeyed peas	9	12	7	58
Green peas	295	341	334	98
Peas and carrots	10	12	10	83
Spinach	91	79	54	68
Squash	39	50	54	108
Southern greens	23	27	17	63
Other vegetables	175	202	165	82
Total vegetables <sup>2</sup>	1,678	2,096	2,055	98
Potatoes	564	627	650	104
Grand total <sup>2</sup>	2,242	2,723	2,705	99

<sup>1</sup>Preliminary. <sup>2</sup>May not add to total because of rounding.

SOURCE: Cold Storage, SRS, USDA. q

**Table 18.—Potato crop utilization**

Use	1980		1981		1982	
	Quantity	Percent of crop	Quantity	Percent of crop	Quantity	Percent of crop
	<i>1,000 cwt</i>					
Food						
Table	96,817	32	110,079	33	188,616	34
Frozen products	80,881	27	96,641	28	91,838	26
Dehydration	28,222	9	29,875	9	28,133	8
Chips, etc.	37,894	12	39,344	12	40,776	12
Canned	4,047	1	4,169	1	4,494	1
Total	247,861	82	280,108	83	283,857	81
Nonfood						
Livestock feed	3,903	1	3,583	1	6,552	2
Seed	19,152	6	20,501	6	19,412	6
Shrinkage and loss	23,369	8	26,103	8	30,673	9
Other <sup>1</sup>	8,572	3	8,296	2	11,328	3
Total	54,996	18	58,483	17	67,965	19
Total	302,857	100	338,591	100	351,822	100

<sup>1</sup>Includes small amounts used for on-farm food consumption, starch, and flour.

SOURCE: Potatoes and Sweetpotatoes, SRS, USDA.



**Table 19.—Production and per capita consumption of potatoes**

Year	Production	Per capita consumption						
		Total fresh and processed	Fresh	Processed <sup>1</sup>				
				Total <sup>2</sup>	Canned <sup>3</sup>	Frozen	Chips and shoestrings	Dehydrated
	<i>Million cwt</i>			<i>Pounds</i>				
1965	291.1	107.1	67.9	39.3	1.7	14.3	15.8	7.0
1966	307.2	117.0	72.0	44.9	1.7	17.3	16.7	8.7
1967	305.8	108.6	62.1	46.5	1.7	19.0	16.8	8.4
1968	295.4	115.5	65.7	49.8	1.9	21.2	17.1	9.1
1969	312.6	117.0	61.3	55.7	2.0	24.6	17.7	11.0
1970	325.7	116.8	57.3	59.5	2.0	27.7	17.6	11.8
1971	319.3	118.3	56.0	62.2	2.1	30.2	17.3	12.1
1972	296.4	118.8	56.6	62.2	2.2	30.5	16.9	12.3
1973	300.0	115.9	51.1	64.8	2.3	32.9	16.5	12.7
1974	342.4	113.2	47.4	65.8	2.3	32.7	16.0	14.4
1975	322.0	120.5	53.8	66.7	2.0	34.3	15.7	14.4
1976	357.7	115.1	50.5	64.6	1.9	36.4	16.0	10.0
1977	355.3	120.3	53.6	66.7	2.2	36.5	16.6	11.1
1978	366.3	120.4	50.8	69.6	2.2	38.8	17.0	11.3
1979	342.5	119.6	54.3	65.3	2.1	35.4	17.1	10.4
1980	302.9	117.7	55.8	61.9	1.9	33.7	16.9	9.1
1981	338.6	112.6	47.2	65.4	1.8	36.3	17.0	10.3
1982 <sup>4</sup>	351.8	114.2	48.6	65.6	1.8	36.2	17.4	9.9

<sup>1</sup>Fresh-weight basis. <sup>2</sup>Includes flour. <sup>3</sup>Includes potatoes canned in soups, stews, and other combinations. <sup>4</sup>Preliminary.

**Table 20.—Potatoes: U.S. quarterly and season average prices received by growers**

Year	1st	2nd	3rd	4th	Season average <sup>1</sup>
<i>Dollars per cwt</i>					
1977	3.52	4.31	4.19	3.10	3.55
1978	3.23	4.15	5.04	3.07	3.38
1979	2.93	2.97	3.42	3.33	3.43
1980	3.35	3.77	6.66	5.51	6.55
1981	7.67	8.59	7.19	4.36	5.41
1982	4.84	6.30	5.52	3.73	4.45
1983	3.72	5.57	6.61	<sup>2</sup> 4.75	<sup>2</sup> 5.25-5.75

<sup>1</sup>Season average price of crop in indicated year. <sup>2</sup>Unofficial ERS projection.

SOURCE: Agricultural Prices, SRS, USDA.

**Table 21.—Quarterly retail price index of potatoes**

Year	1st	2nd	3rd	4th	Season average
<i>1967=100</i>					
1977	185.1	232.3	219.8	178.6	203.9
1978	186.7	211.3	256.0	193.3	211.8
1979	195.4	207.6	212.1	197.9	203.2
1980	203.5	219.4	316.9	295.4	258.8
1981	346.7	392.3	373.0	287.8	350.0
1982	295.7	323.8	323.8	242.0	296.3
1983	239.3	381.9	333.0	<sup>1</sup> 300.0	<sup>1</sup> 288.6

<sup>1</sup>Unofficial ERS projection.

SOURCE: Consumer Price Index, Bureau of Labor Statistics.

**Table 22.—Shipping point potato prices**

Variety and shipping point	1982			1983		
	August 14	September 17	October 19	August 15	September 19	October 17
	<i>Dollars per cwt</i>					
Round whites						
Maine <sup>1</sup>	—	—	—	—	—	6.78
Long Island <sup>1</sup>	5.00	4.70	4.62	10.46	8.76	9.26
Michigan <sup>1</sup>	4.10	3.80	3.98	—	8.50	—
Round reds						
Colorado <sup>2</sup>	—	—	7.50	—	—	8.50
Red River Valley <sup>2</sup>	—	—	6.00	—	—	7.00
Russets						
Idaho <sup>3</sup>	—	—	14.50	—	19.00	16.50
Washington <sup>4</sup>	—	3.50	—	—	5.50	4.25
Wisconsin <sup>3</sup>	16.00	11.80	11.33	—	—	—

<sup>1</sup>50-pound sack. <sup>2</sup>100-pound sack. <sup>3</sup>70-80-90 count cartons (50 pounds) <sup>4</sup>100-pound sack nonsize A's.

SOURCE: Weekly summary of shipping point prices, AMS, USDA.

**Table 23.—Potatoes: Acreage, yield, and production by season, State and region**

Seasonal group and area	Harvested acreage			Yield			Production		
	1981	1982	1983 <sup>1</sup>	1981	1982	1983 <sup>1</sup>	1981	1982	1983 <sup>1</sup>
	<i>1,000 acres</i>				<i>Cwt</i>			<i>1,000 cwt</i>	
Winter	11.6	11.0	11.3	189	206	194	2,198	2,263	2,143
Spring	78.0	78.0	75.4	266	264	232	20,765	20,559	17,479
Summer	95.0	97.2	93.4	211	222	187	20,035	21,474	17,473
Fall	1,052.5	1,087.7	1,053.9	281	283	278	295,593	307,526	292,696
Eastern total	177.5	183.9	163.2	260	252	233	46,225	46,810	37,985
Maine	104.0	106.0	93.0	255	255	235	26,520	27,030	21,855
New York	43.5	45.5	40.8	281	264	248	12,240	12,015	10,118
Pennsylvania	21.0	23.5	21.5	250	245	200	5,250	5,758	4,300
Central total	293.8	307.4	314.8	218	216	206	64,124	66,379	64,792
Wisconsin	53.5	64.5	60.0	340	350	310	18,190	22,575	18,600
North Dakota	115.0	115.0	121.0	175	150	170	20,125	17,250	20,570
Minnesota	70.0	64.0	65.0	190	180	175	13,300	11,520	11,375
Michigan	30.0	33.0	33.0	235	245	225	7,050	8,085	7,425
Western total	581.2	596.4	575.9	323	322	330	185,244	194,337	189,919
Idaho	330.0	339.0	332.0	256	270	261	84,540	91,710	86,660
Washington	108.0	110.0	103.0	490	480	520	52,920	52,800	53,560
Oregon	54.0	52.5	48.5	402	402	427	21,710	21,105	20,710
Colorado	40.0	45.0	44.0	290	285	300	11,600	12,825	13,200
California	18.7	18.5	19.0	370	410	400	6,919	7,585	7,600

<sup>1</sup>Indicated as of October 1.

SOURCE: Crop Production, SRS, USDA.

**Table 24.—Potatoes: U.S. exports and imports**

Crop year <sup>1</sup>	Table	Seed	Dehydrated	Frozen	Total <sup>2</sup>
	<i>Metric tons</i>				
Exports					
1977/78	156,565	—	36,130	16,773	446,634
1978/79	129,547	—	49,980	30,159	544,723
1979/80	82,067	8,043	51,797	35,796	529,461
1980/81	116,701	8,798	32,422	44,282	444,259
1981/82	95,392	10,835	34,452	48,299	447,434
1982/83	81,207	4,800	22,248	47,859	339,686
Imports					
1977/78	41,041	30,240	809	1,793	80,611
1978/79	34,233	27,779	1,134	6,963	83,989
1979/80	57,924	27,107	220	5,778	98,149
1980/81	104,830	71,091	1,036	5,829	194,935
1981/82	163,525	61,595	529	8,642	246,160
1982/83 <sup>3</sup>	123,960	32,365	NA	11,994	NA

<sup>1</sup>October-September. <sup>2</sup>Fresh-weight equivalent. Frozen conversion factor equals 2, and dehydrated 7.1. <sup>3</sup>Oct.-Aug. NA = Not available.

SOURCE: Bureau of Census.

**Table 25.—Sweetpotatoes: U.S. acreage, yield per acre, and production**

Area	Harvested acreage			Yield per acre			Production		
	1981	1982	1983 <sup>1</sup>	1981	1982	1983 <sup>1</sup>	1981	1982	1983 <sup>1</sup>
	<i>1,000 acres</i>				<i>Cwt</i>			<i>1,000 cwt</i>	
North Carolina	39.0	41.0	35.0	120	140	115	4,680	5,740	4,025
Louisiana	26.0	25.0	22.0	100	100	90	2,600	2,500	1,980
California	8.9	9.2	8.8	185	190	190	1,647	1,748	1,672
Other	35.4	35.9	32.2	108	120	107	3,825	4,302	3,450
United States	109.3	111.1	98.0	117	129	114	12,752	14,290	11,127

<sup>1</sup>Indicated as of October 1.

SOURCE: Crop Production, SRS, USDA.



**Table 26.—Quarterly and season average grower prices for sweetpotatoes**

Year	1st	2nd	3rd	4th	Season average <sup>1</sup>
<i>Dollars per cwt</i>					
1978	12.63	16.77	13.68	9.33	10.60
1979	12.47	16.30	15.39	8.49	8.92
1980	10.27	12.83	13.46	12.83	13.60
1981	18.37	23.37	15.63	12.07	13.60
1982	17.20	18.10	11.11	6.54	7.90
1983	8.12	10.23	11.03		<sup>2</sup> 12-15

<sup>1</sup>Season average price of crop in indicated year. <sup>2</sup>Unofficial ERS estimate.

SOURCE: Agricultural Prices, SRS, USDA.

**Table 27.—Supply and disappearance of canned sweetpotatoes**

Season	Carryover	Pack	Supply	Disappearance
<i>Million cases 24/303's</i>				
1975/76	4.6	7.7	12.3	9.6
1976/77	2.7	8.0	10.7	9.2
1977/78	1.5	7.2	8.7	8.0
1978/79	.6	9.4	10.0	7.9
1979/80	2.2	9.2	11.4	8.6
1980/81	2.7	5.9	8.6	8.0
1981/82	.6	8.0	8.6	6.9
1982/83	1.6	7.0	8.7	6.5
1983/84	2.1			

<sup>1</sup>SOURCE: National Food Processors Association.

**Table 28.—Sweetpotatoes: U.S. production and per capita consumption**

Year	Production	Per capita consumption					
		Fresh		Canned		Total	
		Farm	Retail	Farm	Retail	Farm	Retail
1,000 cwt		Pounds					
1972	12,170	3.7	3.3	1.3	1.0	5.0	4.3
1973	12,156	3.4	3.1	1.6	1.2	5.0	4.3
1974	13,339	3.6	3.2	1.3	1.0	4.9	4.2
1975	12,891	4.1	3.7	1.3	1.0	5.4	4.7
1976	13,273	4.1	3.7	1.2	.9	5.3	4.6
1977	11,885	3.7	3.3	1.0	.8	4.7	4.1
1978	13,115	3.5	3.2	1.0	.8	4.5	4.0
1979	13,370	3.8	3.4	1.0	.8	4.8	4.2
1980	10,953	3.4	3.1	1.2	.9	4.6	4.0
1981	12,752	3.3	3.0	1.0	.8	4.3	3.8
1982	14,290	4.0	3.6	.9	.7	4.9	4.3
1983	11,127						

SOURCES: Crop Production, SRS, and ERS, USDA.

**Table 29.—Mushrooms: Production, use, grower price, and value**

Season	Production	Processing use	Fresh-market	Price per pound	Value of sales
<i>Million pounds</i>				<i>Cents</i>	<i>Million dollars</i>
1973/74	279	177	102	44.1	123.4
1974/75	299	173	126	49.2	147.2
1975/76	310	168	142	61.7	191.1
1976/77	347	196	151	73.7	255.7
1977/78	399	208	191	77.1	307.6
1978/79	454	224	230	79.7	361.8
1979/80	470	214	256	78.4	368.6
1980/81	470	195	275	79.8	374.5
1981/82	517	198	319	81.0	418.7
1982/83	491	154	337	87.9	431.4

SOURCE: Mushrooms, SRS, USDA.

**Table 30.—Mushrooms: Per capita consumption**

Year	Fresh	Canned	
		Product weight	Fresh weight <sup>1</sup>
<i>Pounds</i>			
1965/66	.2	.3	.5
1970/71	.3	.5	.8
1975/76	.7	.6	.9
1976/77	.7	.7	1.1
1977/78	.9	.8	1.3
1978/79	1.0	.8	1.2
1979/80	1.1	.9	1.4
1980/81	1.2	.8	1.3
1981/82	1.4	.8	1.2
1982/83	1.5	.9	1.4

<sup>1</sup>Fresh-weight conversion factor is 1.538.

**Table 31.—Supply and disappearance of mushrooms**

Year	Production	Imports <sup>1</sup>	Supply	Exports <sup>1</sup>	Military <sup>1</sup>	Apparent disappearance	Per capita disappearance
				<i>Million pounds</i>			<i>Pounds</i>
1978/79	454.0	148.7	602.7	1.5	1.6	599.6	2.7
1979/80	470.1	179.8	649.9	1.7	1.6	646.6	2.9
1980/81	469.6	156.4	626.0	1.1	1.6	623.3	2.8
1981/82	517.1	135.2	652.4	2.5	1.6	648.3	2.8
1982/83	490.8	200.5	691.3	2.4	1.5	687.4	3.0

<sup>1</sup>Fresh-weight equivalent.

SOURCE: Mushrooms, SRS, USDA, Bureau of Census, and Foreign Agriculture Service

**Table 32.—Canned mushrooms: U.S. sales, imports, and apparent consumption**

Year	Sales of U.S. product	Imports <sup>1</sup>	Apparent consumption	Market share of imports
	<i>Million pounds</i>		<i>Percent</i>	
1978/79	90.8	83.8	174.6	48
1979/80	95.5	110.7	206.1	54
1980/81	99.4	95.2	194.7	49
1981/82	92.2	94.8	187.0	51
1982/83	<sup>2</sup> 91.9	113.5	205.5	55

<sup>1</sup>Includes canned straw mushrooms. <sup>2</sup>Estimate based on July-March sales.

SOURCE: Foreign Agricultural Service, USDA (compiled from statistics of International Trade Commission and Bureau of Census.

**Table 33.—Canned mushroom imports, total and selected countries**

Countries	July-June 1980-1981	July-June 1981-1982	July-June 1982-1983
	<i>Million pounds</i>		
China	20.2	33.5	42.9
Taiwan	39.4	30.0	41.2
Hong Kong	21.4	21.4	16.8
Korea, Republic of	11.3	6.5	7.3
Other	3.0	3.5	5.2
World total	95.3	94.9	113.4

SOURCE: Bureau of Census.

**Table 34.—Dry edible beans: Acreage, yield per acre, and production, annual 1981, 1982, and indicated 1983**

	Acreage			Yield per acre			Production <sup>1, 2</sup>		
	1981	1982	1983 <sup>3</sup>	1981	1982	1983 <sup>3</sup>	1981	1982	1983 <sup>3</sup>
	<i>1,000 acres</i>			<i>Pounds</i>			<i>1,000 cwt</i>		
California	224	226	150	1,833	1,700	1,805	4,105	3,842	2,708
Colorado	185	170	107	1,450	1,210	1,230	2,683	2,057	1,316
Idaho	243	141	98	1,760	1,840	1,780	4,277	2,594	1,744
Michigan	590	550	340	1,220	1,350	1,250	7,198	7,425	4,250
Nebraska	230	212	130	1,750	1,500	1,650	4,025	3,180	2,145
North Dakota	415	240	157	1,100	1,050	950	4,565	2,520	1,492
Other <sup>4</sup>	335	225	132	1,591	1,398	1,363	5,330	3,146	1,799
United States	2,222	1,764	1,114	1,448	1,404	1,387	32,183	24,764	15,454

<sup>1</sup>Excludes beans grown for garden seed. <sup>2</sup>Cleaned basis. <sup>3</sup>Indicated as of October 1. <sup>4</sup>Includes Kansas, Minnesota, Montana, New York, Utah, Washington, and Wyoming.

SOURCE: Crop Production, SRS, USDA.



**Table 35.—Dry edible beans: U.S. quarterly and season-average prices received by growers**

Year	1st	2nd	3rd	4th	Season average <sup>1</sup>
<i>Dollars per cwt</i>					
1977	14.87	16.93	15.50	22.90	20.20
1978	21.73	19.53	16.40	16.57	17.30
1979	17.30	18.73	20.73	21.50	22.80
1980	24.76	23.03	25.53	26.00	27.60
1981	28.60	34.20	28.33	23.23	21.00
1982	19.70	18.17	15.67	13.73	13.80
1983	12.07	14.83	21.60		<sup>2</sup> 22-28

<sup>1</sup>Season-average price of crop in indicated year. <sup>2</sup>Unofficial ERS projection.

SOURCE: Agricultural Prices, SRS, USDA.

**Table 36.—Dry edible beans: Dealer prices for selected classes<sup>1</sup>**

Class and area	Oct. 19, 1982	Oct. 18, 1983
<i>Dollars per cwt</i>		
Pintos		
Colorado	15.25	24.75
Idaho	15.00	24.25
North Dakota-Minnesota	14.00	24.75
Great Northern		
W. Nebraska-E. Wyoming	18.25	27.75
Pea (Navy) beans		
Michigan	14.25	30.00
N. Dakota-Minnesota	14.50	30.00
California		
Large lima	32.00	47.00
Baby lima	22.75	27.50
Red kidney	24.50	35.50

<sup>1</sup>F.o.b. dealer selling prices for carlots and trucklots, basis U.S. No. 1, cleaned and bagged. NA = Not available.

SOURCE: Bean Market News, AMS, Denver.

**Table 37.—U.S. pulse exports**

	Total seasonal <sup>1</sup>			1983 as percentage of 1982
Crop/Variety	1980/81	1981/82	1982/83	
<i>Million pounds</i>				
Dry beans				
Navy	222.9	177.0	196.5	111
Great Northern	141.5	154.8	151.8	98
Pinto	698.0	845.8	31.5	4
Other	412.6	516.5	246.5	48
Total	1,475.0	1,694.1	626.3	37
Dry peas	237.5	247.8	315.0	127
Lentils	150.4	158.7	110.1	69
Total pulses	1,862.9	2,100.6	1,051.3	50

<sup>1</sup>September-August crop year.

SOURCE: Bureau of Census.

**Table 38.—Dry edible beans: U.S. annual calendar year production, exports, and per capita consumption**

Year	Production	Exports <sup>1</sup>	Per capita consumption <sup>1</sup>
<i>Million pounds</i>			<i>Pounds</i>
1972	1,798	345	5.6
1973	1,627	484	7.0
1974	2,033	436	5.0
1975	1,744	427	6.6
1976	1,784	353	6.2
1977	1,655	424	6.2
1978	1,894	593	4.8
1979	2,048	558	6.2
1980	2,640	1,320	5.0
1981	3,218	1,733	4.9
1982	2,476	1,078	6.7
1983 <sup>1</sup>	1,545		

<sup>1</sup>Includes shipments to territories and dry-weight equivalent of canned beans. <sup>2</sup>Unofficial ERS estimate.

**Table 39.—Dry peas and lentils: U.S. acreage, yield, and production**

Class	Acreage			Yield per acre			Production		
	1981	1982	1983	1981	1982	1983	1981	1982	1983
<i>1,000 acres</i>				<i>Pounds</i>			<i>Million pounds</i>		
Green peas	80.7	170.0	158.2	4,374	3,403	3,928	173,228	259,959	295,009
Yellow peas	34.4	38.1	33.2	1,886	1,529	1,718	64,972	58,252	57,133
Lentils	193.0	183.0	101.0	1,023	856	930	197,416	156,723	93,928
Austrian winter peas	10.4	29.1	23.3	1,425	1,326	1,745	14,820	38,629	40,711
Total	318.5	420.2	315.7	1,414	1,222	1,542	450,436	513,563	486,781

SOURCE: American Dry Pea and Lentil Association.

**Table 40.—Grower prices of dry edible peas and lentils**

Crop	1982			1983		
	July	Aug.	Sept.	July	Aug.	Sept.
	<i>Dollars per cwt</i>					
Green peas	10.90	9.35	8.95	9.90	9.00	9.00
Yellow peas	9.70	8.80	8.25	8.40	8.00	8.00
Lentils	16.00	14.50	14.10	14.40	15.50	15.20

SOURCE: Bean Market News, AMS, Denver.

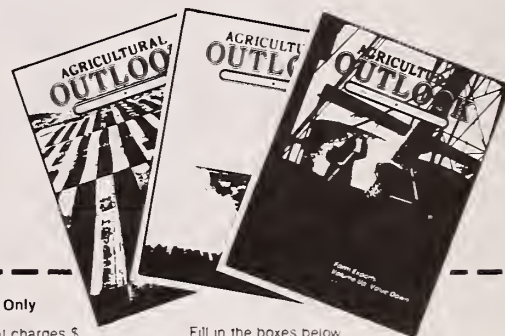
**Table 41.—Per capita consumption of dry peas and lentils**

Year	Dry peas and lentils
	<i>Pounds</i>
1970/71	.37
1975/76	.37
1976/77	.40
1977/78	.42
1978/79	.44
1979/80	.40
1980/81	.42
1981/82	.44
1982/83	.49

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